Test ID: 32025435

Question #1 of 60

Question ID: 609929

Questions 61-66 relate to Connor Burton.

Connor Burton, CFA, is the managing partner for United Partners, a small investment advisory firm that employs three investment professionals and currently has approximately $250 million of assets under management. The client base of United Partners is varied, and accounts range in size from small retirement accounts to a $30 million private school endowment. In addition to Burton's administrative responsibilities as the managing partner at United, he also serves as an investment advisor to several clients. Because United Partners is a small firm, the company does not employ any research analysts but instead obtains its investment research products and services from two national brokerage firms, which in turn execute all client trades for United Partners. The arrangement with the two brokers has enabled United to assure its clients that the firm will always seek the best execution for them by having both brokers competitively bid for United's business.

A prospective client, Harold Crossley, has approached Burton about shifting some of his personal assets under management from MoneyCorp to United Partners. Burton provides Crossley with a packet of marketing information that Burton developed himself. The packet contains five years of historical performance data for a value weighted composite of the firm's discretionary accounts. Burton states that the composite's management style and performance results are representative of the management style and returns that United can be expected to achieve for Crossley. Also included in the information packet are brief bios on each of United's three investment professionals. Crossley notices that all three of United's investment professionals are described as "CFA charterholders," but he is not familiar with the designation. In response to Crossley's inquiry, Burton explains the significance of the program by stating that the designation, which is only awarded after passing three rigorous exams and obtaining the requisite years of work experience, represents a commitment to the highest standards of ethical and professional conduct.

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Several months later, Burton is invited to a road show for an initial public offering (IPO) for SolutionWare, a software company. Security Bank is serving as lead underwriter on SolutionWare's IPO. Burton attends the meeting, which is led by two investment bankers and one software industry research analyst from Security Bank who covers SolutionWare. Burton notes that the bankers from Security Bank have included detailed financial statements for SolutionWare in the offering prospectus and also disclosed that Security Bank provides a warehouse line of credit to SolutionWare. After the meeting, Burton calls Crossley to recommend the purchase of SolutionWare equity. Crossley heeds Burton's advice and tells him to purchase 5,000 shares. Before placing Crossley's order, Burton reads the SolutionWare marketing materials and performs a detailed analysis of expected future earnings and other key factors for the investment decision. Burton determines that the offering would be a suitable investment for his own retirement portfolio. United Partners, being a small firm, has no formal written policy regarding trade allocation, employee participation in equity offerings, or established blackout periods for employee trading. Burton adds

his order to Crossley's order and places a purchase order for the combined number of shares with Security Bank. Burton is later notified that the offering was oversubscribed, and United Partners was only able to obtain roughly 75% of the desired number of shares. To be fair, Burton allocates the shares on a pro-rata basis between Crossley's account and his own retirement account. When Burton notifies Crossley of the situation, Crossley is nonetheless pleased to have a position, though smaller than requested, in such a "hot" offering.

....

Did the marketing materials presented to Crossley by Burton violate Standard III(D) Performance Presentation or Standard VII(B) Reference to CFA Institute, the CFA Designation, and the CFA Program?

A) Standard III(D) only.

B) Standard VII(B) only.

C) Both Standard III(D) and Standard VII(B) are violated.

Question #2 of 60

Question ID: 609930

Connor Burton, CFA, is the managing partner for United Partners, a small investment advisory firm that employs three investment professionals and currently has approximately $250 million of assets under management. The client base of United Partners is varied, and accounts range in size from small retirement accounts to a $30 million private school endowment. In addition to Burton's administrative responsibilities as the managing partner at United, he also serves as an investment advisor to several clients. Because United Partners is a small firm, the company does not employ any research analysts but instead obtains its investment research products and services from two national brokerage firms, which in turn execute all client trades for United Partners. The arrangement with the two brokers has enabled United to assure its clients that the firm will always seek the best execution for them by having both brokers competitively bid for United's business.

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agrees to the arrangement. Going forward, Burton will use Security Bank to execute all of Crossley's trades.

Several months later, Burton is invited to a road show for an initial public offering (IPO) for SolutionWare, a software company. Security Bank is serving as lead underwriter on SolutionWare's IPO. Burton attends the meeting, which is led by two investment bankers and one software industry research analyst from Security Bank who covers SolutionWare. Burton notes that the bankers from Security Bank have included detailed financial statements for SolutionWare in the offering prospectus and also disclosed that Security Bank provides a warehouse line of credit to SolutionWare. After the meeting, Burton calls Crossley to recommend the purchase of SolutionWare equity. Crossley heeds Burton's advice and tells him to purchase 5,000 shares. Before placing Crossley's order, Burton reads the SolutionWare marketing materials and performs a detailed analysis of expected future earnings and other key factors for the investment decision. Burton determines that the offering would be a suitable investment for his own retirement portfolio. United Partners, being a small firm, has no formal written policy regarding trade allocation, employee participation in equity offerings, or established blackout periods for employee trading. Burton adds his order to Crossley's order and places a purchase order for the combined number of shares with Security Bank. Burton is later notified that the offering was oversubscribed, and United Partners was only able to obtain roughly 75% of the desired number of shares. To be fair, Burton allocates the shares on a pro-rata basis between Crossley's account and his own retirement account. When Burton notifies Crossley of the situation, Crossley is nonetheless pleased to have a position, though smaller than requested, in such a "hot" offering.

....

According to the CFA Institute Standards of Professional Conduct, the trading arrangement between Burton and Security Bank is *most likely*:

A) a violation because the practice of directed brokerage violates the member's duty of loyalty to the client.

B) a violation because although Security Bank's execution is competitive, Burton will not be able to always obtain the best execution for his client.

C) not a violation because the brokerage is the property of the client.

Question #3 of 60

Question ID: 609931

Connor Burton, CFA, is the managing partner for United Partners, a small investment advisory firm that employs three investment professionals and currently has approximately $250 million of assets under management. The client base of United Partners is varied, and accounts range in size from small retirement accounts to a $30 million private school endowment. In addition to Burton's administrative responsibilities as the managing partner at United, he also serves as an investment advisor to several clients. Because United Partners is a small firm, the company does not employ any research analysts but instead obtains its investment research products and services from two national brokerage firms, which in turn execute all client trades for United Partners. The arrangement with the two brokers has enabled United to assure its clients that the firm will always seek the best execution for them by having both brokers competitively bid for United's business.

A prospective client, Harold Crossley, has approached Burton about shifting some of his personal assets under management from MoneyCorp to United Partners. Burton provides Crossley with a packet of marketing information that Burton developed himself. The packet contains five years of historical performance data for a value weighted composite of the firm's discretionary accounts. Burton states that the composite's management style and performance results are representative of

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Several months later, Burton is invited to a road show for an initial public offering (IPO) for SolutionWare, a software company. Security Bank is serving as lead underwriter on SolutionWare's IPO. Burton attends the meeting, which is led by two investment bankers and one software industry research analyst from Security Bank who covers SolutionWare. Burton notes that the bankers from Security Bank have included detailed financial statements for SolutionWare in the offering prospectus and also disclosed that Security Bank provides a warehouse line of credit to SolutionWare. After the meeting, Burton calls Crossley to recommend the purchase of SolutionWare equity. Crossley heeds Burton's advice and tells him to purchase 5,000 shares. Before placing Crossley's order, Burton reads the SolutionWare marketing materials and performs a detailed analysis of expected future earnings and other key factors for the investment decision. Burton determines that the offering would be a suitable investment for his own retirement portfolio. United Partners, being a small firm, has no formal written policy regarding trade allocation, employee participation in equity offerings, or established blackout periods for employee trading. Burton adds his order to Crossley's order and places a purchase order for the combined number of shares with Security Bank. Burton is later notified that the offering was oversubscribed, and United Partners was only able to obtain roughly 75% of the desired number of shares. To be fair, Burton allocates the shares on a pro-rata basis between Crossley's account and his own retirement account. When Burton notifies Crossley of the situation, Crossley is nonetheless pleased to have a position, though smaller than requested, in such a "hot" offering.

....

According to CFA Institute Standards of Professional Conduct, which of the following statements *best* describes the circumstances under which Burton may enter into the referral agreement with Security Bank? Burton may enter into the agreement:

A) under no circumstances.

B) only after receiving written permission from clients.

C) only after fully disclosing the referral arrangement to clients and prospective clients.

Question #4 of 60

Question ID: 609934

Connor Burton, CFA, is the managing partner for United Partners, a small investment advisory firm that employs three investment professionals and currently has approximately $250 million of assets under management. The client base of United Partners is varied, and accounts range in size from small retirement accounts to a $30 million private school endowment. In addition to Burton's administrative responsibilities as the managing partner at United, he also serves as an investment advisor to several clients. Because United Partners is a small firm, the company does not employ any research analysts but instead obtains its investment research products and services from two national brokerage firms, which in turn execute all client trades for United Partners. The arrangement with the two brokers has enabled United to assure its clients that the firm will always seek the best execution for them by having both brokers competitively bid for United's business.

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....

With respect to the road show meeting regarding the initial public offering of SolutionWare, did Security Bank comply with the

With respect to the road show meeting regarding the initial public offering of SolutionWare, did Security Bank comply with the requirements and recommendations of the CFA Institute Research Objectivity Standards?

A) No, because it publicly revealed that it also provides corporate finance services for SolutionWare.

B) No, because it failed to provide Burton with adequate information to make an investment decision.

C) No, because it allowed an analyst to participate in a marketing road show for a company that he covers.

Question #5 of 60

Question ID: 609932

Connor Burton, CFA, is the managing partner for United Partners, a small investment advisory firm that employs three investment professionals and currently has approximately $250 million of assets under management. The client base of United Partners is varied, and accounts range in size from small retirement accounts to a $30 million private school endowment. In addition to Burton's administrative responsibilities as the managing partner at United, he also serves as an investment advisor to several clients. Because United Partners is a small firm, the company does not employ any research analysts but instead obtains its investment research products and services from two national brokerage firms, which in turn execute all client trades for United Partners. The arrangement with the two brokers has enabled United to assure its clients that the firm will always seek the best execution for them by having both brokers competitively bid for United's business.

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....

According to CFA Institute Standards of Professional Conduct, Burton's recommendation to Crossley that he purchase shares of the SolutionWare initial public offering is *most likely*:

A) in violation of Standard III(C) Suitability for not determining the appropriateness of the investment for the portfolio and Standard I(B) Independence and Objectivity for not making the investment recommendation to all of his clients at the same time.

B) in violation of Standard V(A) Diligence and Reasonable Basis for not thoroughly analyzing the investment before making a recommendation and in violation of Standard III(C) Suitability for not determining the appropriateness of the investment for the portfolio.

C) in violation of Standard V(A) Diligence and Reasonable Basis for not thoroughly analyzing the investment before making a recommendation and in violation of Standard I(B) Independence and Objectivity for not making the investment recommendation to all of his clients at the same time.

Question #6 of 60

Question ID: 609933

Connor Burton, CFA, is the managing partner for United Partners, a small investment advisory firm that employs three investment professionals and currently has approximately $250 million of assets under management. The client base of United Partners is varied, and accounts range in size from small retirement accounts to a $30 million private school endowment. In addition to Burton's administrative responsibilities as the managing partner at United, he also serves as an investment advisor to several clients. Because United Partners is a small firm, the company does not employ any research analysts but instead obtains its investment research products and services from two national brokerage firms, which in turn execute all client trades for United Partners. The arrangement with the two brokers has enabled United to assure its clients that the firm will always seek the best execution for them by having both brokers competitively bid for United's business.

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According to CFA Institute Standards of Professional Conduct, Burton's participation in the SolutionWare offering *most likely*:

A) is in violation of the Standards because his actions adversely affected the interests of Crossley.

B) is in violation of the Standards because he did not disclose his participation in the offering to Security Bank.

C) is not in violation of the Standards since the shares obtained in the IPO were distributed equitably on a pro-rata basis.

Question #7 of 60

Question ID: 691379

Questions 67-72 relate to Ernie Smith.

Ernie Smith and Jamal Sims are analysts with the firm of Madison Consultants. Madison provides statistical modeling and advice to portfolio managers throughout the United States and Canada.

In an effort to estimate future cash flows and value the Canadian stock market, Smith has been examining the country's aggregate retail sales. He runs two autoregressive regression models in an attempt to determine whether there are any patterns in the data, utilizing nine years of unadjusted monthly retail sales data. One model uses a lag one variable and the other adds a lag twelve variable. The results of both regressions are shown in Exhibits 1 and 2.

Exhibit 1: Canadian Autoregressive Model with Lag 1

Multiple R	0.91
R-Square	0.83
Adjusted R-Square	0.83
Standard Error	17,252.76
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1.00	150,813,197,793	150,813,197,793	506.67	0.00
Residual	106.00	31,551,711,544	297,657,656		
Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	21,750.16	10,379.77	2.10	0.04
Lag 1	0.92	0.04	22.51	0.00

Exhibit 2: Canadian Autoregressive Model with Lag 1 and Lag 12

Regression Statistics for 2nd Regression	
Multiple R	0.96
R-Square	0.93
Adjusted R-Square	0.92
Standard Error	11,336.27
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2.00	168,871,246,751	84,435,623,375	657.03	<0.01

Residual	105.00	13,493,662,586	128,511,072
Total	107.00	182,364,909,338	

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	-24,861.28	7,872.56	-3.16	<0.01
Lag 1	0.30	0.06	5.22	<0.01
Lag 12	0.84	0.07	11.85	<0.01

Sims has been assigned the task of valuing the U.S. stock market and uses data similar to the data that Smith uses for Canada. He decides, however, that the data should be transformed. He takes the natural log of the data and uses it in the following model:

> $\Delta \ln \text{sales}_t = b_0 + b_1 \Delta \ln \text{sales}_{t-1}$

Parameter estimates for the autoregressive model and the actual data for the two most recent months are shown in Exhibit 3.

Exhibit 3: U.S. Autoregressive Model

Intercept	0.052
Lag 1 coefficient	0.684
Actual sales one month ago (-1)	6,270
Actual sales two months ago (-2)	6,184

Smith and Sims are concerned that the data for Canadian retail sales may be more appropriately modeled with an ARCH process. Smith states, that in order to find out, he would take the residuals from the original autoregressive model for Canadian retail sales and then square them.

Sims states that these residuals would then be regressed against the Canadian retail sales data using the following equation: $e_t = b_0 + b_1X_t$, where e represents the residual terms from the original regression and X represents the Canadian retail sales data. If b_1 is statistically different from zero, then the regression model contains an ARCH process.

Smith also examines the quarterly inflation data for an emerging market over the past nine years. He models the data using an autoregressive model with a lag one independent variable, which he finds is statistically different from zero. He wonders whether he should also include lag two and lag four terms, given the magnitude of the autocorrelations of the residuals shown in Exhibit 4, assuming a 5% significance level. The critical *t*-values, assuming a 5% significance level and 35 degrees of freedom, are 2.03 for a two-tail test and 1.69 for a one-tail test.

Exhibit 4: Emerging Market Autoregressive Model

Lag	*Autocorrelation*
1	0.0829
2	0.1293
3	0.0227
4	0.1882

Sims is investigating the performance of 5-year European and British bonds based on the actions of the U.S. Federal Reserve. He uses the U.S. Federal Funds rate. The two regressions he uses are:

> $BY_{E,t} = b_0 + b_1FF_{US,t}$

> $BY_{E,t} = b_0 + b_1FF_{US,t}$

> $BY_{B,t} = b_0 + b_1FF_{US,t}$

> where: FF is the Federal Funds rate in the United States (US), and BY is the bond yield in the European Union (E) and Great Britain (B).

Before he runs this regression, he investigates the characteristics of the dependent and independent variables. He finds that the Federal Funds rate in the United States and the bond yield in Great Britain have a unit root but that the bond yield in the European Union does not. Furthermore, the Federal Funds rate in the United States and the bond yield in Great Britain are cointegrated, but the Federal Funds rate in the United States and the bond yield in the European Union are not.

Which of the following models would be the *best* formulation for the Canadian retail sales data?

A) $X_t = b_0 + b_1X_{t-1}$.
B) $X_t = b_1X_{t-1} + b_2X_{t-12}$.
C) $X_t = b_0 + b_1X_{t-1} + b_2X_{t-12}$.

Question #8 of 60

Question ID: 691380

Ernie Smith and Jamal Sims are analysts with the firm of Madison Consultants. Madison provides statistical modeling and advice to portfolio managers throughout the United States and Canada.

In an effort to estimate future cash flows and value the Canadian stock market, Smith has been examining the country's aggregate retail sales. He runs two autoregressive regression models in an attempt to determine whether there are any patterns in the data, utilizing nine years of unadjusted monthly retail sales data. One model uses a lag one variable and the other adds a lag twelve variable. The results of both regressions are shown in Exhibits 1 and 2.

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Multiple R	0.91
R-Square	0.83
Adjusted R-Square	0.83
Standard Error	17,252.76
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1.00	150,813,197,793	150,813,197,793	506.67	0.00
Residual	106.00	31,551,711,544	297,657,656		
Total	107.00	182,364,909,338			

Total 107.00 182,364,909,338

	Coefficients	Standard Error	T-stat	P-value
Intercept	21,750.16	10,379.77	2.10	0.04
Lag 1	0.92	0.04	22.51	0.00

Exhibit 2: Canadian Autoregressive Model with Lag 1 and Lag 12

Regression Statistics for 2nd Regression	
Multiple R	0.96
R-Square	0.93
Adjusted R-Square	0.92
Standard Error	11,336.27
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2.00	168,871,246,751	84,435,623,375	657.03	<0.01
Residual	105.00	13,493,662,586	128,511,072		
Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	-24,861.28	7,872.56	-3.16	<0.01
Lag 1	0.30	0.06	5.22	<0.01
Lag 12	0.84	0.07	11.85	<0.01

Sims has been assigned the task of valuing the U.S. stock market and uses data similar to the data that Smith uses for Canada. He decides, however, that the data should be transformed. He takes the natural log of the data and uses it in the following model:

> $\Delta \ln \text{sales}_t = b_0 + b_1 \Delta \ln \text{sales}_{t-1}$

Parameter estimates for the autoregressive model and the actual data for the two most recent months are shown in Exhibit 3.

Exhibit 3: U.S. Autoregressive Model

Intercept	0.052
Lag 1 coefficient	0.684
Actual sales one month ago (-1)	6,270
Actual sales two months ago (-2)	6,184

Smith and Sims are concerned that the data for Canadian retail sales may be more appropriately modeled with an ARCH process. Smith states, that in order to find out, he would take the residuals from the original autoregressive model for Canadian retail sales and then square them.

Sims states that these residuals would then be regressed against the Canadian retail sales data using the following equation: $e_t = b_0 + b_1X_t$, where e represents the residual terms from the original regression and X represents the Canadian retail sales data. If b_1 is statistically different from zero, then the regression model contains an ARCH process.

Smith also examines the quarterly inflation data for an emerging market over the past nine years. He models the data using an autoregressive model with a lag one independent variable, which he finds is statistically different from zero. He wonders whether he should also include lag two and lag four terms, given the magnitude of the autocorrelations of the residuals shown in Exhibit 4, assuming a 5% significance level. The critical *t*-values, assuming a 5% significance level and 35 degrees of freedom, are 2.03 for a two-tail test and 1.69 for a one-tail test.

Exhibit 4: Emerging Market Autoregressive Model

Lag	*Autocorrelation*
1	0.0829
2	0.1293
3	0.0227
4	0.1882

Sims is investigating the performance of 5-year European and British bonds based on the actions of the U.S. Federal Reserve. He uses the U.S. Federal Funds rate. The two regressions he uses are:

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> $BY_{B,t} = b_0 + b_1FF_{US,t}$

> where: FF is the Federal Funds rate in the United States (US), and BY is the bond yield in the European Union (E) and Great Britain (B).

Before he runs this regression, he investigates the characteristics of the dependent and independent variables. He finds that the Federal Funds rate in the United States and the bond yield in Great Britain have a unit root but that the bond yield in the European Union does not. Furthermore, the Federal Funds rate in the United States and the bond yield in Great Britain are cointegrated, but the Federal Funds rate in the United States and the bond yield in the European Union are not.

....

The estimate of forecasted sales for the United States this month, using Sims's model, is *closest* to:

A) $6,329.

B) $6,453.

C) $6,667.

Question #9 of 60

Question ID: 691383

Ernie Smith and Jamal Sims are analysts with the firm of Madison Consultants. Madison provides statistical modeling and advice to portfolio managers throughout the United States and Canada.

advice to portfolio managers throughout the United States and Canada.

In an effort to estimate future cash flows and value the Canadian stock market, Smith has been examining the country's aggregate retail sales. He runs two autoregressive regression models in an attempt to determine whether there are any patterns in the data, utilizing nine years of unadjusted monthly retail sales data. One model uses a lag one variable and the other adds a lag twelve variable. The results of both regressions are shown in Exhibits 1 and 2.

Exhibit 1: Canadian Autoregressive Model with Lag 1

Multiple R	0.91
R-Square	0.83
Adjusted R-Square	0.83
Standard Error	17,252.76
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1.00	150,813,197,793	150,813,197,793	506.67	0.00
Residual	106.00	31,551,711,544	297,657,656		
Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	21,750.16	10,379.77	2.10	0.04
Lag 1	0.92	0.04	22.51	0.00

Exhibit 2: Canadian Autoregressive Model with Lag 1 and Lag 12

Regression Statistics for 2nd Regression	
Multiple R	0.96
R-Square	0.93
Adjusted R-Square	0.92
Standard Error	11,336.27
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2.00	168,871,246,751	84,435,623,375	657.03	<0.01
Residual	105.00	13,493,662,586	128,511,072		
Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	-24,861.28	7,872.56	-3.16	<0.01

Lag 1	0.30	0.06	5.22	<0.01
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Smith also examines the quarterly inflation data for an emerging market over the past nine years. He models the data using an autoregressive model with a lag one independent variable, which he finds is statistically different from zero. He wonders whether he should also include lag two and lag four terms, given the magnitude of the autocorrelations of the residuals shown in Exhibit 4, assuming a 5% significance level. The critical *t*-values, assuming a 5% significance level and 35 degrees of freedom, are 2.03 for a two-tail test and 1.69 for a one-tail test.

Exhibit 4: Emerging Market Autoregressive Model

Lag	*Autocorrelation*
1	0.0829
2	0.1293
3	0.0227
4	0.1882

Sims is investigating the performance of 5-year European and British bonds based on the actions of the U.S. Federal Reserve. He uses the U.S. Federal Funds rate. The two regressions he uses are:

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Are the comments of Smith and Sims on the construction of an ARCH model correct?

A) Both comments are correct.

B) Only Smith is correct.

C) Only Sims is correct.

Question #10 of 60

Question ID: 691381

Ernie Smith and Jamal Sims are analysts with the firm of Madison Consultants. Madison provides statistical modeling and advice to portfolio managers throughout the United States and Canada.

In an effort to estimate future cash flows and value the Canadian stock market, Smith has been examining the country's aggregate retail sales. He runs two autoregressive regression models in an attempt to determine whether there are any patterns in the data, utilizing nine years of unadjusted monthly retail sales data. One model uses a lag one variable and the other adds a lag twelve variable. The results of both regressions are shown in Exhibits 1 and 2.

Exhibit 1: Canadian Autoregressive Model with Lag 1

Multiple R	0.91
R-Square	0.83
Adjusted R-Square	0.83
Standard Error	17,252.76
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1.00	150,813,197,793	150,813,197,793	506.67	0.00
Residual	106.00	31,551,711,544	297,657,656		
Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	21,750.16	10,379.77	2.10	0.04
Lag 1	0.92	0.04	22.51	0.00

Exhibit 2: Canadian Autoregressive Model with Lag 1 and Lag 12

Regression Statistics for 2nd Regression	
Multiple R	0.96
R-Square	0.93
Adjusted R-Square	0.92
Standard Error	11,336.27
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2.00	168,871,246,751	84,435,623,375	657.03	<0.01
Residual	105.00	13,493,662,586	128,511,072		
Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	-24,861.28	7,872.56	-3.16	<0.01
Lag 1	0.30	0.06	5.22	<0.01
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Smith also examines the quarterly inflation data for an emerging market over the past nine years. He models the data using an autoregressive model with a lag one independent variable, which he finds is statistically different from zero. He wonders

whether he should also include lag two and lag four terms, given the magnitude of the autocorrelations of the residuals shown in Exhibit 4, assuming a 5% significance level. The critical *t*-values, assuming a 5% significance level and 35 degrees of freedom, are 2.03 for a two-tail test and 1.69 for a one-tail test.

Exhibit 4: Emerging Market Autoregressive Model

Lag	*Autocorrelation*
1	0.0829
2	0.1293
3	0.0227
4	0.1882

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Regarding Smith's emerging market regression, should lag two and lag four terms be included in the regression?

A) Neither Lag should be included.

B) Only Lag 2 should be included.

C) Only Lag 4 should be included.

Question #11 of 60

Question ID: 691382

Ernie Smith and Jamal Sims are analysts with the firm of Madison Consultants. Madison provides statistical modeling and advice to portfolio managers throughout the United States and Canada.

In an effort to estimate future cash flows and value the Canadian stock market, Smith has been examining the country's aggregate retail sales. He runs two autoregressive regression models in an attempt to determine whether there are any patterns in the data, utilizing nine years of unadjusted monthly retail sales data. One model uses a lag one variable and the other adds a lag twelve variable. The results of both regressions are shown in Exhibits 1 and 2.

Exhibit 1: Canadian Autoregressive Model with Lag 1

Multiple R	0.91
R-Square	0.83
Adjusted R-Square	0.83
Standard Error	17,252.76
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1.00	150,813,197,793	150,813,197,793	506.67	0.00
Residual	106.00	31,551,711,544	297,657,656		
Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	21,750.16	10,379.77	2.10	0.04
Lag 1	0.92	0.04	22.51	0.00

Exhibit 2: Canadian Autoregressive Model with Lag 1 and Lag 12

Regression Statistics for 2nd Regression	
Multiple R	0.96
R-Square	0.93
Adjusted R-Square	0.92
Standard Error	11,336.27
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2.00	168,871,246,751	84,435,623,375	657.03	<0.01
Residual	105.00	13,493,662,586	128,511,072		
Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
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Smith also examines the quarterly inflation data for an emerging market over the past nine years. He models the data using an autoregressive model with a lag one independent variable, which he finds is statistically different from zero. He wonders whether he should also include lag two and lag four terms, given the magnitude of the autocorrelations of the residuals shown in Exhibit 4, assuming a 5% significance level. The critical *t*-values, assuming a 5% significance level and 35 degrees of freedom, are 2.03 for a two-tail test and 1.69 for a one-tail test.

Exhibit 4: Emerging Market Autoregressive Model

Lag	*Autocorrelation*
1	0.0829
2	0.1293
3	0.0227
4	0.1882

Sims is investigating the performance of 5-year European and British bonds based on the actions of the U.S. Federal Reserve. He uses the U.S. Federal Funds rate. The two regressions he uses are:

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Will Sims's regressions of European and British bond yields on the U.S. Federal Funds rate produce valid results?

A) Neither Regression is valid.

B) Only Regression 1 is valid.

C) Only Regression 2 is valid.

Question #12 of 60

Question ID: 691384

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In an effort to estimate future cash flows and value the Canadian stock market, Smith has been examining the country's aggregate retail sales. He runs two autoregressive regression models in an attempt to determine whether there are any patterns in the data, utilizing nine years of unadjusted monthly retail sales data. One model uses a lag one variable and the other adds a lag twelve variable. The results of both regressions are shown in Exhibits 1 and 2.

Exhibit 1: Canadian Autoregressive Model with Lag 1

Multiple R	0.91
R-Square	0.83
Adjusted R-Square	0.83
Standard Error	17,252.76
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1.00	150,813,197,793	150,813,197,793	506.67	0.00
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Total	107.00	182,364,909,338			

	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	21,750.16	10,379.77	2.10	0.04
Lag 1	0.92	0.04	22.51	0.00

Exhibit 2: Canadian Autoregressive Model with Lag 1 and Lag 12

Regression Statistics for 2nd Regression	
Multiple R	0.96
R-Square	0.93

Adjusted R-Square	0.92
Standard Error	11,336.27
Observations	108.00

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	2.00	168,871,246,751	84,435,623,375	657.03	<0.01
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	Coefficients	*Standard Error*	*T-stat*	*P-value*
Intercept	-24,861.28	7,872.56	-3.16	<0.01
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....

Which of the following is the *appropriate* test for cointegration?

A) Breusch-Pagan.

B) Durbin-Watson.

C) Engle-Granger.

Question #13 of 60

Question ID: 691385

Questions 73-78 relate to Frank Hoskins and Paul Lanning.

Frank Hoskins and Paul Lanning are economists for a large U.S. investment advisory firm, Platinum Advisors. Hoskins and Lanning use their independent research on U.S. stocks and international stocks to provide advice for the firm's network of advisors. As the senior economist at Platinum, Hoskins is a partner in the firm and is Lanning's supervisor. Lanning has worked for Platinum for four years. At a lunch meeting, the two economists discuss the usefulness of economic theory, economic data, and the resulting forecasts of the global economic and stock market activity.

Hoskins is investigating the growth prospects of the country of Maldavia. Maldavia is a formerly communist country with a population of 3 million located in Eastern Europe. The Maldavian government had been aggressive in instituting political reform and encouraging the growth of financial markets. However, due to recent increases in stock market volatility, the Maldavian government is considering reigning-in trading volume by imposing a tax on stock market transactions. Hoskins states that this development is not encouraging for future economic growth.

Lanning is examining the country of Petra. Petra is a country of 25 million located in South America and rich with natural resources, including oil. The recently-elected president of Petra, Carlos Basile, has announced that he would like to ensure that the citizens of Petra enjoy the benefits of its natural resources rather than foreign oil companies, and that the government will nationalize these oil companies. Lanning states that these changes would not be beneficial for the future growth of the Petrian economy.

One of the many items they study when examining an economy or stock market is the economic information released by governments and private organizations. Hoskins and Lanning use this information to adjust their economic growth forecasts and to accordingly adjust portfolio allocations to the bond and stock markets. Examining information for Maldavia, Hoskins has learned that the Maldavian private sector has embarked on an ambitious plan to increase labor productivity by purchasing more machinery for its factories. Plotting the productivity curve for Maldavia, Hoskins states that labor productivity should increase because the productivity curve will shift up.

Lanning is examining the historical record of economic growth in Petra. He has gathered the data in Exhibit 1 to determine potential economic growth.

Exhibit 1: Economic Data for Petra from 20X1 to 20X7

Real GDP growth rate	3.9%
Growth rate in capital	1.4%
Growth rate in labor force	1.9%
Labor cost/total factor cost	0.52

Lanning then turns his attention to the countries of Alicia and Felicia. He notes that the GDP growth rate in both countries is comparable. Alicia's capital to labor ratio is USD 5,000 and the output to capital ratio is USD 12,000. Felicia's capital to labor ratio is USD 2,800 while output to capital ratio is USD 10,000. Alicia has a relatively younger labor force and the labor cost represents 35% of total factor cost. Both countries have extensive restrictions on foreign direct investments in their economy.

It has long been Platinum's policy for its economists to use long-term economic growth trends to forecast future economic growth, stock returns, and dividends in a country. Lanning also examines the economy of Tiberia. Tiberia has a population of 11 million and is located in northern Africa. Its economy is diversified, and its main exports are agricultural products and heavy machinery. The country's economy has been growing at an annual rate of 6.2% for the past ten years, in part because of technological advances in the manufacturing of heavy equipment. These advances involve the use of computer-operated welding machines that have made the manufacturing process more efficient. Lanning is worried, however, that the current GDP growth rate may not be sustainable and is considering advising Platinum's portfolio managers to decrease their portfolio allocations to the country. Before doing so, he will consult with Hoskins.

....

Are the statements made by Hoskins and Lanning regarding the future growth of the Maldavian and Petrian economies *most likely* to be correct or incorrect?

A) Both are correct.

B) Only Hoskins is correct.

C) Only Lanning is correct.

Question #14 of 60

Question ID: 691390

Frank Hoskins and Paul Lanning are economists for a large U.S. investment advisory firm, Platinum Advisors. Hoskins and Lanning use their independent research on U.S. stocks and international stocks to provide advice for the firm's network of advisors. As the senior economist at Platinum, Hoskins is a partner in the firm and is Lanning's supervisor. Lanning has worked for Platinum for four years. At a lunch meeting, the two economists discuss the usefulness of economic theory, economic data, and the resulting forecasts of the global economic and stock market activity.

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Growth rate in labor force	1.9%
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Lanning then turns his attention to the countries of Alicia and Felicia. He notes that the GDP growth rate in both countries is comparable. Alicia's capital to labor ratio is USD 5,000 and the output to capital ratio is USD 12,000. Felicia's capital to labor ratio is USD 2,800 while output to capital ratio is USD 10,000. Alicia has a relatively younger labor force and the labor cost represents 35% of total factor cost. Both countries have extensive restrictions on foreign direct investments in their economy.

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technological advances in the manufacturing of heavy equipment. These advances involve the use of computer-operated welding machines that have made the manufacturing process more efficient. Lanning is worried, however, that the current GDP growth rate may not be sustainable and is considering advising Platinum's portfolio managers to decrease their portfolio allocations to the country. Before doing so, he will consult with Hoskins.

....

Hoskins's statement regarding Maldavian labor productivity and its productivity curve is:

A) incorrect, because labor productivity is not affected in this scenario.

B) incorrect, because labor productivity will decrease because of the low skill level of the labor force.

C) incorrect, because although labor productivity will increase, the increase will result from a movement along the productivity curve.

Question #15 of 60

Question ID: 691386

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Hoskins is investigating the growth prospects of the country of Maldavia. Maldavia is a formerly communist country with a population of 3 million located in Eastern Europe. The Maldavian government had been aggressive in instituting political reform and encouraging the growth of financial markets. However, due to recent increases in stock market volatility, the Maldavian government is considering reigning-in trading volume by imposing a tax on stock market transactions. Hoskins states that this development is not encouraging for future economic growth.

Lanning is examining the country of Petra. Petra is a country of 25 million located in South America and rich with natural resources, including oil. The recently-elected president of Petra, Carlos Basile, has announced that he would like to ensure that the citizens of Petra enjoy the benefits of its natural resources rather than foreign oil companies, and that the government will nationalize these oil companies. Lanning states that these changes would not be beneficial for the future growth of the Petrian economy.

One of the many items they study when examining an economy or stock market is the economic information released by governments and private organizations. Hoskins and Lanning use this information to adjust their economic growth forecasts and to accordingly adjust portfolio allocations to the bond and stock markets. Examining information for Maldavia, Hoskins has learned that the Maldavian private sector has embarked on an ambitious plan to increase labor productivity by purchasing more machinery for its factories. Plotting the productivity curve for Maldavia, Hoskins states that labor productivity should increase because the productivity curve will shift up.

Lanning is examining the historical record of economic growth in Petra. He has gathered the data in Exhibit 1 to determine potential economic growth.

Exhibit 1: Economic Data for Petra from 20X1 to 20X7	
Real GDP growth rate	3.9%
Growth rate in capital	1.4%
Growth rate in labor force	1.9%
Labor cost/total factor cost	0.52

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Which country will experience a higher growth rate in potential GDP due to capital deepening and due to removal of restrictions on inflow of foreign capital?

	Capital deepening	Removal of restrictions on inflow of capital
A)	Alicia	Felicia
B)	Felicia	Felicia
C)	Felicia	Alicia

Question #16 of 60

Question ID: 691387

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....

Petra's GDP growth rate attributable to growth in total factor productivity is *closest* to:

A) 0.6%.

B) 1.6%.

C) 2.24%.

Question #17 of 60

Question ID: 691388

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The classical growth theory predicts that Tiberia's long-run future GDP per capita is *most likely* to:

A) decline due to diminishing marginal productivity of capital.

B) settle at subsistence level due to adjustments in the population.

C) remain unchanged from the current levels unless the government increases the budget deficit.

Question #18 of 60

Question ID: 691389

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....

The endogenous growth theory predicts that the Tiberian GDP growth rate is *most likely* to:

A) settle at a long-run steady state because of diminishing marginal productivity of capital.

B) continue to increase because technological advances will be shared by many sectors of the economy.

C) decline because the current GDP growth rate is not sustainable.

Question #19 of 60

Question ID: 691414

Questions 79-84 relate to Tobin Yoakam.

Tobin Yoakam, CFA, is analyzing the financial performance of Konker Industries, a U.S. company which is publicly traded under the ticker KONK. Yoakam is particularly concerned about the quality of Konker's financial statements and its choices of accounting methodologies.

Below is a summary of Konker's financial statements prepared by Yoakam.

Konker Industries			
Income Statement	**20X8**	**Balance Sheet**	**20X8**
($ in thousands)		*($ in thousands)*	
Gross sales	55,435	Cash and equivalents	457

Sales discounts, returns, and allowances	1,352	Short term marketable securities	927
Net sales	54,083	Accounts receivable (net)	47,740
Cost of goods sold	26,500	Inventories	20,963
SG&A expenses	15,625	PP&E (net of depreciation)	25,371
Depreciation expense	1,082	Total assets	95,458
Earnings before interest and taxes	10,876		
Interest expense	693	Accounts payable	24,994
Earnings before taxes	10,183	Other current liabilities	1,209
Taxes (tax rate 40%)	4,073	Long term debt	21,770
Net income	6,110	Total liabilities	47,973
		Common stock	40,314
Dividends	5,046	Retained earnings	7,171
Net addition to retained earnings	1,064	Total liabilities and shareholders equity	95,458

Konker has an operating lease for several of its large machining tools. The remaining lease term is five years, and the annual lease payments are $2 million. The applicable interest rate on the operating lease is 9%. Yoakam believes that the operating lease should be capitalized and treated as a finance lease. For purposes of adjusting the financial statements, Yoakam believes that the machining tools should be depreciated using straight-line depreciation.

At the beginning of 20X8, Konker formed a qualified special purpose entity (QSPE) and sold a portion of its accounts receivables to the QSPE. Under U.S. GAAP, QSPE was exempt from consolidation requirements. The total amount of accounts receivables sold to the QSPE was $13.5 million. Yoakam has noted in his research that the Financial Accounting Standards Board (FASB) eliminated qualified special purpose entities.

Konker has three major operating divisions: Konker Industrial, Konker Defense, and Konker Capital. Yoakam has computed the EBIT margin for each division over the last three years, as well as the ratio of the percentage of total capital expenditures to the percentage of total assets for each division.

	EBIT / Assets			*CapEx % / Assets %*		
	20X8	**20X7**	**20X6**	**20X8**	**20X7**	**20X6**
Konker Industrial	6.2%	7.5%	6.7%	1.5	1.3	1.2
Konker Defense	6.7%	7.2%	6.9%	0.5	0.6	0.7
Konker Capital	10.1%	12.1%	11.1%	0.7	0.6	0.5

Since Yoakam is concerned about the quality of Konker's earnings, he decides to analyze the accrual ratios using the balance sheet approach. The table below contains the last three years of accrual ratios for Konker and the industry average.

Balance Sheet Accrual Ratios	**20X8**	**20X7**	**20X6**

Konker	4.5%	15.0%	7.0%
Industry average	4.8%	4.4%	5.2%

With respect to the balance sheet accrual ratio, which of the following, other things equal, would *most likely* lead to an increase in the ratio for a growing company?

A) Extending the time the firm takes to pay its suppliers.

B) A significant build-up of cash.

C) A build-up of inventory.

Question #20 of 60

Question ID: 691413

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....

If Yoakam capitalizes Konker's operating lease in his analysis, the Konker's adjusted interest coverage ratio for 20X8 would be *closest* to:

A) 7.12.

B) 8.13.

C) 15.69.

Question #21 of 60

Question ID: 691396

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When FASB retroactively eliminated the allowance of QSPEs created for the securitization of receivables, the *most likely* impact on Konker's financial statements would have been:

A) an increase in equity and an increase in interest expense.

B) no change in assets but an increase in financial leverage ratios.

C) an increase in financial leverage ratios and a decrease in the interest coverage ratio.

Question #22 of 60

Question ID: 691410

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....

An analyst is considering the effects of income reported under the equity method on certain financial ratios. For a firm that reports equity income as non-operating income (not included in EBIT), removing equity income from the financial statements would *most likely* result in:

A) an increase in the tax burden term in the extended Du Pont decomposition of ROE.

B) an increase in the asset turnover ratio.

C) a decrease in the interest coverage ratio.

Question #23 of 60

Question ID: 691411

Tobin Yoakam, CFA, is analyzing the financial performance of Konker Industries, a U.S. company which is publicly traded under the ticker KONK. Yoakam is particularly concerned about the quality of Konker's financial statements and its choices of accounting methodologies.

Below is a summary of Konker's financial statements prepared by Yoakam.

Konker Industries			
Income Statement	**20X8**	**Balance Sheet**	**20X8**
($ in thousands)		*($ in thousands)*	
Gross sales	55,435	Cash and equivalents	457
Sales discounts, returns, and allowances	1,352	Short term marketable securities	927
Net sales	54,083	Accounts receivable (net)	47,740
Cost of goods sold	26,500	Inventories	20,963
SG&A expenses	15,625	PP&E (net of depreciation)	25,371
Depreciation expense	1,082	Total assets	95,458
Earnings before interest and taxes	10,876		
Interest expense	693	Accounts payable	24,994
Earnings before taxes	10,183	Other current liabilities	1,209
Taxes (tax rate 40%)	4,073	Long term debt	21,770
Net income	6,110	Total liabilities	47,973
		Common stock	40,314
Dividends	5,046	Retained earnings	7,171
Net addition to retained earnings	1,064	Total liabilities and shareholders equity	95,458

Konker has an operating lease for several of its large machining tools. The remaining lease term is five years, and the annual lease payments are $2 million. The applicable interest rate on the operating lease is 9%. Yoakam believes that the operating lease should be capitalized and treated as a finance lease. For purposes of adjusting the financial statements, Yoakam believes that the machining tools should be depreciated using straight-line depreciation.

At the beginning of 20X8, Konker formed a qualified special purpose entity (QSPE) and sold a portion of its accounts receivables to the QSPE. Under U.S. GAAP, QSPE was exempt from consolidation requirements. The total amount of accounts receivables sold to the QSPE was $13.5 million. Yoakam has noted in his research that the Financial Accounting Standards Board (FASB) eliminated qualified special purpose entities.

Konker has three major operating divisions: Konker Industrial, Konker Defense, and Konker Capital. Yoakam has computed the EBIT margin for each division over the last three years, as well as the ratio of the percentage of total capital expenditures

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	EBIT / Assets			*CapEx % / Assets %*		
	20X8	**20X7**	**20X6**	**20X8**	**20X7**	**20X6**
Konker Industrial	6.2%	7.5%	6.7%	1.5	1.3	1.2
Konker Defense	6.7%	7.2%	6.9%	0.5	0.6	0.7
Konker Capital	10.1%	12.1%	11.1%	0.7	0.6	0.5

Since Yoakam is concerned about the quality of Konker's earnings, he decides to analyze the accrual ratios using the balance sheet approach. The table below contains the last three years of accrual ratios for Konker and the industry average.

Balance Sheet Accrual Ratios	**20X8**	**20X7**	**20X6**
Konker	4.5%	15.0%	7.0%
Industry average	4.8%	4.4%	5.2%

Regarding the three operating divisions of Konker, Yoakam should be *most* concerned that:

A) Konker is growing the Industrial division over time.

B) the operating ROA of the Capital division has fallen over the last year.

C) the ratio of the Capex percent change to the asset percentage is significantly less than one for the Defense division.

Question #24 of 60

Question ID: 691412

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	20X8	**20X7**	**20X6**	**20X8**	**20X7**	**20X6**
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Industry average	4.8%	4.4%	5.2%

....

Based on the balance sheet accruals ratios, Yoakam would *most likely* conclude which of the following regarding the earnings

of Konker?

A) The volatile accruals ratios are indicators that Konker may be manipulating earnings.

B) Konker's earnings quality was lower than its peer group in 20X8 but higher in 20X6 and 20X7.

C) Konker's earnings quality worsened from 20X6 to 20X8 but was superior to its peer group over the 3-year period.

Question #25 of 60

Question ID: 691391

Questions 85-90 relate to Galena Petrovich.

Galena Petrovich, CFA, is an analyst in the New York office of TRS Investment Management, Inc. Petrovich is an expert in the industrial electrical equipment sector and is analyzing Fisher Global. Fisher is a global market leader in designing, manufacturing, marketing, and servicing electrical systems and components, including fluid power systems and automotive engine air management systems.

Fisher has generated double-digit growth over the past ten years, primarily as the result of acquisitions, and has reported positive net income in each year. Fisher reports its financial results using International Financial Reporting Standards (IFRS).

Petrovich is particularly interested in a transaction that occurred seven years ago, before the change in accounting standards, in which Fisher used the pooling method to account for a large acquisition of Dartmouth Industries, an industry competitor. She would like to determine the effect of using the purchase method instead of the pooling method on the financial statements of Fisher. Fisher exchanged common stock for all of the outstanding shares of Dartmouth.

Fisher also has a 50% ownership interest in a joint venture with its major distributor, a U.S. company called Hydro Distribution. She determines that Fisher has reported its ownership interest under the equity method, and that the joint venture has been profitable since it was established three years ago. She decides to adjust the financial statements to show how the financial statements would be affected if Fisher had reported its ownership under the acquisition method. Fisher is also considering acquiring 80% to 100% of Brown and Sons Company. Petrovich must consider the effect of such an acquisition on Fisher's financial statements.

Petrovich determines from the financial statement footnotes that Fisher reported an unrealized gain in its most recent income statement related to debt securities that are designated at fair value. Competitor firms following U.S. GAAP classify similar debt securities as available-for-sale.

Finally, Petrovich finds a reference in Fisher's footnotes regarding a special purpose entity (SPE). Fisher has reported its investment in the SPE using the equity method, but Petrovich believes that the consolidation method more accurately reflects Fisher's true financial position, so she makes the appropriate adjustments to the financial statements.

....

Regarding the prior purchase that was accounted for under the pooling of interests method, had Fisher Global reported this purchase under the acquisition method:

A) the assets and liabilities of the purchased firm would not be included on Fisher's

A) the assets and liabilities of the purchased firm would not be included on Fisher's balance sheet.

B) balance sheet assets and liabilities of the purchased firm would have been reported at fair value.

C) reported goodwill could be less depending on the fair value of the identifiable assets and liabilities compared to their book values.

Question #26 of 60

Question ID: 691392

Galena Petrovich, CFA, is an analyst in the New York office of TRS Investment Management, Inc. Petrovich is an expert in the industrial electrical equipment sector and is analyzing Fisher Global. Fisher is a global market leader in designing, manufacturing, marketing, and servicing electrical systems and components, including fluid power systems and automotive engine air management systems.

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Finally, Petrovich finds a reference in Fisher's footnotes regarding a special purpose entity (SPE). Fisher has reported its investment in the SPE using the equity method, but Petrovich believes that the consolidation method more accurately reflects Fisher's true financial position, so she makes the appropriate adjustments to the financial statements.

....

Had Fisher Global reported its investment in the joint venture under the acquisition method rather than under the equity method, it is *most likely* that:

A) reported revenue would have been the same.

B) reported expenses would have been lower.

C) net income would not have been affected.

Question #27 of 60

Question ID: 691394

Galena Petrovich, CFA, is an analyst in the New York office of TRS Investment Management, Inc. Petrovich is an expert in the industrial electrical equipment sector and is analyzing Fisher Global. Fisher is a global market leader in designing, manufacturing, marketing, and servicing electrical systems and components, including fluid power systems and automotive engine air management systems.

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....

Regarding any potential goodwill on the acquisition of Brown and Sons being considered by Fisher Global, which of the following statements is *most accurate*? The goodwill will be reported as an asset and:

A) must be reviewed for impairment at least annually, with different test for impairment under IFRS and U.S. GAAP. Impairment losses can be reversed under U.S. GAAP but not under IFRS.

B) amortized, and must be reviewed for impairment at least annually, though impairment losses cannot be reversed under either GAAP or IFRS.

C) must be reviewed for impairment at least annually with different tests for impairment under IFRS and U.S. GAAP. The losses on impairment cannot be reversed under either U.S. GAAP or under IFRS.

Question #28 of 60

Question ID: 691395

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Finally, Petrovich finds a reference in Fisher's footnotes regarding a special purpose entity (SPE). Fisher has reported its investment in the SPE using the equity method, but Petrovich believes that the consolidation method more accurately reflects Fisher's true financial position, so she makes the appropriate adjustments to the financial statements.

....

If Fisher Global decides to purchase only 80% of Brown and Sons, under IFRS they will have the option to:

A) report the acquisition as either a business combination or as an acquisition.

B) value the identifiable assets and liabilities of Brown and Sons at their current book values or at fair market value.

C) report more or less goodwill depending on the accounting method they choose.

Question #29 of 60

Question ID: 691393

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Finally, Petrovich finds a reference in Fisher's footnotes regarding a special purpose entity (SPE). Fisher has reported its investment in the SPE using the equity method, but Petrovich believes that the consolidation method more accurately reflects Fisher's true financial position, so she makes the appropriate adjustments to the financial statements.

....

For comparison purposes, Petrovich decides to reclassify Fisher Global's debt securities as available-for-sale. Ignoring any effect on income taxes, which of the following *best* describes the effects of the necessary adjustments?

A) Net income is lower and asset turnover is higher.

B) Return on assets is lower and debt-to-equity is lower.

C) Return on equity is lower and debt-to-total capital is not affected.

Question #30 of 60

Question ID: 691397

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Finally, Petrovich finds a reference in Fisher's footnotes regarding a special purpose entity (SPE). Fisher has reported its investment in the SPE using the equity method, but Petrovich believes that the consolidation method more accurately reflects Fisher's true financial position, so she makes the appropriate adjustments to the financial statements.

....

What are the *likely* effects on return on assets (ROA) and net profit margin (ignoring any tax effects) of correctly adjusting for Fisher Global's investment in the SPE using the acquisition method?

	ROA	Net profit margin
A)	No change	Decrease
B)	Decrease	No change
C)	Decrease	Decrease

Question #31 of 60

Question ID: 692228

Questions 91-96 relate to Wayward Distributing, Inc.

Jenna Stuart is a financial analyst for Deuce Hardware Company, a U.S. company that reports its results in U.S. dollars. Wayward Distributing, Inc., is a foreign subsidiary of Deuce Hardware, which began operations on January 1, 2007. Wayward is located in a foreign country and reports its results in the local currency called the Rho. Selected balance sheet information for Wayward is shown in the following table.

Selected Balance Sheet Accounts Wayward Distributing Inc. (in Rho)

	12/31/07	*12/31/08*
Cash and accounts receivable	5,000	5,200

Inventory	3,800	4,900
Net fixed assets	6,200	7,400
Total assets	15,000	17,500
Current liabilities	2,000	2,000
Long-term debt	9,000	9,500
Shareholders' equity	4,000	6,000

Stuart has been asked to analyze how the reported financial results of Wayward will be affected by the choice of the current rate or temporal methods of accounting for foreign operations. She has gathered the following exchange rate information on the $/Rho exchange rate:

- Spot rate on 1/01/08: $0.35 per Rho
- Spot rate on 12/31/08: $0.45 per Rho
- Average spot rate during 2008: $0.42 per Rho

Will the current rate method report a translation gain or loss for 2008, and will that gain or loss be reported on Deuce's income statement or the balance sheet?

A) Gain on the balance sheet.

B) Gain on the income statement.

C) Loss on the balance sheet and a gain on the income statement.

Question #32 of 60

Question ID: 692229

Jenna Stuart is a financial analyst for Deuce Hardware Company, a U.S. company that reports its results in U.S. dollars. Wayward Distributing, Inc., is a foreign subsidiary of Deuce Hardware, which began operations on January 1, 2007. Wayward is located in a foreign country and reports its results in the local currency called the Rho. Selected balance sheet information for Wayward is shown in the following table.

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Total assets	15,000	17,500
Current liabilities	2,000	2,000
Long-term debt	9,000	9,500

Shareholders' equity	4,000	6,000

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- Spot rate on 1/01/08: $0.35 per Rho
- Spot rate on 12/31/08: $0.45 per Rho
- Average spot rate during 2008: $0.42 per Rho

Will the temporal method report a translation gain or loss for 2008, and will that gain or loss be reported on Deuce's income statement or the balance sheet?

A) Gain on the balance sheet.

B) Loss on the income statement.

C) Gain on the balance sheet and a loss on the income statement.

Question #33 of 60

Question ID: 692230

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- Spot rate on 1/01/08: $0.35 per Rho
- Spot rate on 12/31/08: $0.45 per Rho

- Average spot rate during 2008: $0.42 per Rho

Will total asset turnover (calculated using end-of-period balance sheet figures) *likely* be larger when calculated from the Rho financial statements or the financial statements translated into the reporting currency (U.S.$) using the current rate method?

A) Larger on US$ statements.

B) Larger on Rho statements.

C) No difference.

Question #34 of 60

Question ID: 692231

Jenna Stuart is a financial analyst for Deuce Hardware Company, a U.S. company that reports its results in U.S. dollars. Wayward Distributing, Inc., is a foreign subsidiary of Deuce Hardware, which began operations on January 1, 2007. Wayward is located in a foreign country and reports its results in the local currency called the Rho. Selected balance sheet information for Wayward is shown in the following table.

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- Spot rate on 1/01/08: $0.35 per Rho
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Will fixed asset turnover (calculated using end-of-period balance sheet figures) *likely* be lower when calculated using the current rate method or remeasured using the temporal method?

A) Lower under the temporal method.

A) Lower under the temporal method.

B) Lower under the current rate method.

C) The same under either method.

Question #35 of 60

Question ID: 692227

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Suppose for this question only that Stuart has determined that (1) the operating, financing, and investing decisions related to Wayward's operations are typically made by Wayward's local management located in the foreign country; and (2) some of Wayward's accounts receivable are denominated in a different foreign currency called the Del (Dl). Which method is the *most appropriate* to use to translate the Del receivables into Rho, according to U.S. GAAP?

A) The current rate method.

B) The temporal method.

C) Use the current rate for translation with any gains or losses reflected in the income statement.

Question #36 of 60

Question ID: 692232

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- Spot rate on 12/31/08: $0.45 per Rho
- Average spot rate during 2008: $0.42 per Rho

Suppose for this question only that Stuart decides to use the current rate method to translate Wayward's results into U.S. dollars. Is it *likely* that the quick ratio and the interest coverage ratio will be the same or different in Rho before translation and in U.S. dollars after translation?

A) Neither the quick ratio nor the interest coverage ratio will change.

B) Only the interest coverage ratio will change.

C) Only the quick ratio will change.

Question #37 of 60

Question ID: 692323

Questions 97-102 relate to John Baragutti.

John Baragutti, CFA, works in the transaction services arm of HLBB, a large accountancy firm with a substantial advisory business on the east coast of the United States. He is currently advising on a potential M&A transaction between two airlines. Tarpon Airlines, Inc. (Tarpon), which operates out of the east coast of the United States, is the larger of the two companies and its board has entered into discussions with the smaller Clear Air S.A. (Clear). Clear, based in France, would provide Tarpon access to a significant number of landing slots in major European airports.

Baragutti is currently reviewing the income statement of Clear in order to address some concerns raised by Tarpon's board. Merger discussions had initially progressed rapidly after an initial review of Clear's last 5 years' income statements, which revealed an operating profit margin that was in line with that of Tarpon. The board has historically been extremely cautious about acquiring any potential target with a profit margin lower than its own. However, further investigation has revealed concerns regarding the treatment of pension costs in the income statement.

Tarpon runs only a defined contribution pension scheme for its employees and an employee incentive stock option scheme. Clear, however, has a defined benefit scheme that is currently overfunded. Extracts from the pension note included in Clear's annual report are shown in Exhibit 1.

Exhibit 1: Pension Note (Extracts)

Present Value of Defined Benefit Obligations		*Fair Value of Plan Assets*	
	€ million		*€ million*
As at 1 January 2015	8,110	As at 1 January 2015	8,920
Current service cost	170	Return on plan assets	145
Past service cost	15	Employer contributions	306
Interest cost	365	Benefits paid	(202)
Benefits paid	(202)		
Remeasurement (gains)/loss	218		
As at 31 December 2015	8,676	As at 31 December 2015	9,169

Notes:

- Pension benefit obligation has been calculated using the average yield on high-quality corporate bonds with similar durations to the benefits in the scheme, currently 4.5%.
- Due to turbulent economic conditions in the eurozone, return on plan assets was only 1.63%.
- Remeasurement gains at the start of the year totaled €231 million.

Having never accounted for a defined benefit scheme, in its initial review, the board of Tarpon did not consider the impact of the defined benefit plan on the operating margin. As a result, Baragutti has been asked to address three issues.

First, Clear prepares its financial statements using IFRS whereas Tarpon reports under U.S. GAAP. The board wants to gain an understanding of Clear's pension expense for 2015 as computed under U.S. GAAP. Secondly, the disclosure of certain elements of the pension cost has confused the board. Although the notes to the income statement identify that the pension cost has an interest element, this has been included within operating profit.

Finally, the board is concerned about future adjustments that may be required to deal with the amortization of the remeasurement gains that have accumulated in Clear's pension scheme. Baragutti intends to perform the following calculations to deal with each issue independently:

Issue 1

Recalculate pension expense included in the income statement under U.S. GAAP. Baragutti has observed that companies reporting pension expense under U.S. GAAP have used an average of 3% for the expected return on plan assets and he intends to apply this rate where applicable. He does not intend to amortize any of this year's prior service cost.

Issue 2

Assuming IFRS, recalculate the local currency (€) operating margin excluding any pension scheme interest element. The current income statement before Baragutti's adjustments is shown in Exhibit 2.

Issue 3

Baragutti prepares the following note containing two statements to advise the board on the future amortization of actuarial gains and losses:

Statement 1

> "Under IFRS, when cumulative remeasurement gains/losses are large enough, they will be amortized through the income statement over the average service life of the employees, reducing net income if net losses are amortized, and increasing net income if net gains are amortized."

Statement 2

> "Under U.S. GAAP, the amortization of net actuarial losses will increase leverage (i.e., debt-to-equity ratio), whereas the amortization of net actuarial gains will decrease leverage."

Exhibit 2 - Income Statement (Extracts)

	2015 *$ millions*
Revenue	
Passenger	9,321
Cargo	456
Total	**9,777**
Employee costs	3,654
Depreciation, amortization	894
Aircraft operating lease costs	156
Fuel and oil costs	1,853
Engineering and other aircraft costs	542
Landing fees	1,458
Exchange rate losses	221
Ground equipment costs	765
Total Operating Costs	**9,543**
Operating Profit	**234**
Fuel derivative losses	32

Finance costs	193
Finance income	89
Profit before tax	**98**

Note: *Employee costs include the defined benefit pension expense for the period.*

Baragutti has also been asked to raise any other points he thinks the board should be aware of surrounding this issue. He intends make the following two observations on cash flow calculations and the impact of Tarpon's employee share option scheme.

Cash Flow Calculations

Baragutti noted that the board has used Clear's operating cash flow as a basis for its valuation of the entity. He intends to notify the board that whenever it encounters a company with a defined benefit scheme, in his opinion, it would be advisable to adjust CFO to reflect the fact that employer contributions are not the same as the cost of the scheme.

Employee Share Option Scheme

Although Tarpon does not have a defined benefit pension scheme, it does have an equivalent employee compensation expense in the form of an employee share option scheme. Just as there is a cost to Clear of its defined benefit scheme, the cost of Tarpon's share option scheme will be charged as an expense to the income statement and hence reduce retained earnings and equity.

....

The total periodic pension cost for Clear's defined benefit pension scheme in 2016 is *closest* to:

A) €405 million.

B) €421 million.

C) €623 million.

Question #38 of 60

Question ID: 692324

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Tarpon runs only a defined contribution pension scheme for its employees and an employee incentive stock option scheme.

Clear, however, has a defined benefit scheme that is currently overfunded. Extracts from the pension note included in Clear's annual report are shown in Exhibit 1.

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Notes:

- Pension benefit obligation has been calculated using the average yield on high-quality corporate bonds with similar durations to the benefits in the scheme, currently 4.5%.
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Finally, the board is concerned about future adjustments that may be required to deal with the amortization of the remeasurement gains that have accumulated in Clear's pension scheme. Baragutti intends to perform the following calculations to deal with each issue independently:

Issue 1

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Issue 2

Assuming IFRS, recalculate the local currency (€) operating margin excluding any pension scheme interest element. The current income statement before Baragutti's adjustments is shown in Exhibit 2.

Issue 3

Baragutti prepares the following note containing two statements to advise the board on the future amortization of actuarial gains and losses:

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> "Under U.S. GAAP, the amortization of net actuarial losses will increase leverage (i.e., debt-to-equity ratio), whereas the amortization of net actuarial gains will decrease leverage."

Exhibit 2 - Income Statement (Extracts)

	2015 *$ millions*
Revenue	
Passenger	9,321
Cargo	456
Total	**9,777**
Employee costs	3,654
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Operating Profit	**234**
Fuel derivative losses	32
Finance costs	193
Finance income	89
Profit before tax	**98**

Note: *Employee costs include the defined benefit pension expense for the period.*

Baragutti has also been asked to raise any other points he thinks the board should be aware of surrounding this issue. He intends make the following two observations on cash flow calculations and the impact of Tarpon's employee share option scheme.

Cash Flow Calculations

Baragutti noted that the board has used Clear's operating cash flow as a basis for its valuation of the entity. He intends to notify the board that whenever it encounters a company with a defined benefit scheme, in his opinion, it would be advisable to

adjust CFO to reflect the fact that employer contributions are not the same as the cost of the scheme.

Employee Share Option Scheme

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....

In dealing with issue 1 as outlined, Baragutti is likely to calculate a pension expense *closest* to:

A) 149 million.

B) 267 million.

C) 390 million.

Question #39 of 60

Question ID: 692260

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	€ million		*€ million*
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Remeasurement (gains)/loss	218		
As at 31 December 2015	8,676	As at 31 December 2015	9,169

Notes:

- Pension benefit obligation has been calculated using the average yield on high-quality corporate bonds with similar durations to the benefits in the scheme, currently 4.5%.
- Due to turbulent economic conditions in the eurozone, return on plan assets was only 1.63%.
- Remeasurement gains at the start of the year totaled €231 million.

Having never accounted for a defined benefit scheme, in its initial review, the board of Tarpon did not consider the impact of the defined benefit plan on the operating margin. As a result, Baragutti has been asked to address three issues.

First, Clear prepares its financial statements using IFRS whereas Tarpon reports under U.S. GAAP. The board wants to gain an understanding of Clear's pension expense for 2015 as computed under U.S. GAAP. Secondly, the disclosure of certain elements of the pension cost has confused the board. Although the notes to the income statement identify that the pension cost has an interest element, this has been included within operating profit.

Finally, the board is concerned about future adjustments that may be required to deal with the amortization of the remeasurement gains that have accumulated in Clear's pension scheme. Baragutti intends to perform the following calculations to deal with each issue independently:

Issue 1

Recalculate pension expense included in the income statement under U.S. GAAP. Baragutti has observed that companies reporting pension expense under U.S. GAAP have used an average of 3% for the expected return on plan assets and he intends to apply this rate where applicable. He does not intend to amortize any of this year's prior service cost.

Issue 2

Assuming IFRS, recalculate the local currency (€) operating margin excluding any pension scheme interest element. The current income statement before Baragutti's adjustments is shown in Exhibit 2.

Issue 3

Baragutti prepares the following note containing two statements to advise the board on the future amortization of actuarial gains and losses:

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Statement 2

> "Under U.S. GAAP, the amortization of net actuarial losses will increase leverage (i.e., debt-to-equity ratio), whereas the amortization of net actuarial gains will decrease leverage."

Exhibit 2 - Income Statement (Extracts)

	2015
	$ millions
Revenue	
Passenger	9,321
Cargo	456
Total	**9,777**
Employee costs	3,654
Depreciation, amortization	894
Aircraft operating lease costs	156
Fuel and oil costs	1,853
Engineering and other aircraft costs	542
Landing fees	1,458
Exchange rate losses	221
Ground equipment costs	765
Total Operating Costs	**9,543**
Operating Profit	**234**
Fuel derivative losses	32
Finance costs	193
Finance income	89
Profit before tax	**98**

Note: *Employee costs include the defined benefit pension expense for the period.*

Baragutti has also been asked to raise any other points he thinks the board should be aware of surrounding this issue. He intends make the following two observations on cash flow calculations and the impact of Tarpon's employee share option scheme.

Cash Flow Calculations

Baragutti noted that the board has used Clear's operating cash flow as a basis for its valuation of the entity. He intends to notify the board that whenever it encounters a company with a defined benefit scheme, in his opinion, it would be advisable to adjust CFO to reflect the fact that employer contributions are not the same as the cost of the scheme.

Employee Share Option Scheme

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....

Using IFRS and Baragutti's suggested adjustments for issue 2, he is likely to calculate an adjusted operating margin *closest* to:

A) 1%.

B) 2%.

C) 6%.

Question #40 of 60

Question ID: 692261

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Exhibit 1: Pension Note (Extracts)

Present Value of Defined Benefit Obligations		*Fair Value of Plan Assets*	
	€ million		*€ million*
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Interest cost	365	Benefits paid	(202)
Benefits paid	(202)		
Remeasurement (gains)/loss	218		
As at 31 December 2015	8,676	As at 31 December 2015	9,169

Notes:

- Pension benefit obligation has been calculated using the average yield on high-quality corporate bonds with similar durations to the benefits in the scheme, currently 4.5%.
- Due to turbulent economic conditions in the eurozone, return on plan assets was only 1.63%.
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First, Clear prepares its financial statements using IFRS whereas Tarpon reports under U.S. GAAP. The board wants to gain an understanding of Clear's pension expense for 2015 as computed under U.S. GAAP. Secondly, the disclosure of certain elements of the pension cost has confused the board. Although the notes to the income statement identify that the pension cost has an interest element, this has been included within operating profit.

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Issue 1

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Issue 2

Assuming IFRS, recalculate the local currency (€) operating margin excluding any pension scheme interest element. The current income statement before Baragutti's adjustments is shown in Exhibit 2.

Issue 3

Baragutti prepares the following note containing two statements to advise the board on the future amortization of actuarial gains and losses:

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Statement 2

> "Under U.S. GAAP, the amortization of net actuarial losses will increase leverage (i.e., debt-to-equity ratio), whereas the amortization of net actuarial gains will decrease leverage."

Exhibit 2 - Income Statement (Extracts)

	2015 *$ millions*
Revenue	
Passenger	9,321
Cargo	456
Total	**9,777**
Employee costs	3,654
Depreciation, amortization	894
Aircraft operating lease costs	156
Fuel and oil costs	1,853
Engineering and other aircraft costs	542

costs	
Landing fees	1,458
Exchange rate losses	221
Ground equipment costs	765
Total Operating Costs	**9,543**
Operating Profit	**234**
Fuel derivative losses	32
Finance costs	193
Finance income	89
Profit before tax	**98**

Note: *Employee costs include the defined benefit pension expense for the period.*

Baragutti has also been asked to raise any other points he thinks the board should be aware of surrounding this issue. He intends make the following two observations on cash flow calculations and the impact of Tarpon's employee share option scheme.

Cash Flow Calculations

Baragutti noted that the board has used Clear's operating cash flow as a basis for its valuation of the entity. He intends to notify the board that whenever it encounters a company with a defined benefit scheme, in his opinion, it would be advisable to adjust CFO to reflect the fact that employer contributions are not the same as the cost of the scheme.

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....

Baragutti is *most likely* to suggest adjusting the cash flow used by the board as a basis of its valuation by:

A) decreasing it if employer contributions are higher than reported pension expense.

B) decreasing it if employer contributions are lower than total periodic pension cost.

C) increasing it if employer contributions are higher than the total periodic pension cost.

Question #41 of 60

Question ID: 692259

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Notes:

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Which of Baragutti's statements on the amortization of actuarial gains and losses in response to issue 3 are *most likely* correct?

A) Both statements are correct.

B) Only statement two is correct.

C) Neither statement is correct.

Question #42 of 60

Question ID: 692262

John Baragutti, CFA, works in the transaction services arm of HLBB, a large accountancy firm with a substantial advisory business on the east coast of the United States. He is currently advising on a potential M&A transaction between two airlines. Tarpon Airlines, Inc. (Tarpon), which operates out of the east coast of the United States, is the larger of the two companies and its board has entered into discussions with the smaller Clear Air S.A. (Clear). Clear, based in France, would provide Tarpon access to a significant number of landing slots in major European airports.

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Notes:

- Pension benefit obligation has been calculated using the average yield on high-quality corporate bonds with similar durations to the benefits in the scheme, currently 4.5%.
- Due to turbulent economic conditions in the eurozone, return on plan assets was only 1.63%.
- Remeasurement gains at the start of the year totaled €231 million.

Having never accounted for a defined benefit scheme, in its initial review, the board of Tarpon did not consider the impact of the defined benefit plan on the operating margin. As a result, Baragutti has been asked to address three issues.

First, Clear prepares its financial statements using IFRS whereas Tarpon reports under U.S. GAAP. The board wants to gain an understanding of Clear's pension expense for 2015 as computed under U.S. GAAP. Secondly, the disclosure of certain elements of the pension cost has confused the board. Although the notes to the income statement identify that the pension cost has an interest element, this has been included within operating profit.

Finally, the board is concerned about future adjustments that may be required to deal with the amortization of the remeasurement gains that have accumulated in Clear's pension scheme. Baragutti intends to perform the following calculations to deal with each issue independently:

Issue 1

Recalculate pension expense included in the income statement under U.S. GAAP. Baragutti has observed that companies reporting pension expense under U.S. GAAP have used an average of 3% for the expected return on plan assets and he intends to apply this rate where applicable. He does not intend to amortize any of this year's prior service cost.

Issue 2

Assuming IFRS, recalculate the local currency (€) operating margin excluding any pension scheme interest element. The current income statement before Baragutti's adjustments is shown in Exhibit 2.

Issue 3

Baragutti prepares the following note containing two statements to advise the board on the future amortization of actuarial gains and losses:

Statement 1

> "Under IFRS, when cumulative remeasurement gains/losses are large enough, they will be amortized through the income statement over the average service life of the employees, reducing net income if net losses are amortized, and increasing

> net income if net gains are amortized."

Statement 2

> "Under U.S. GAAP, the amortization of net actuarial losses will increase leverage (i.e., debt-to-equity ratio), whereas the amortization of net actuarial gains will decrease leverage."

Exhibit 2 - Income Statement (Extracts)

	2015 *$ millions*
Revenue	
Passenger	9,321
Cargo	456
Total	**9,777**
Employee costs	3,654
Depreciation, amortization	894
Aircraft operating lease costs	156
Fuel and oil costs	1,853
Engineering and other aircraft costs	542
Landing fees	1,458
Exchange rate losses	221
Ground equipment costs	765
Total Operating Costs	**9,543**
Operating Profit	**234**
Fuel derivative losses	32
Finance costs	193
Finance income	89
Profit before tax	**98**

Note: *Employee costs include the defined benefit pension expense for the period.*

Baragutti has also been asked to raise any other points he thinks the board should be aware of surrounding this issue. He intends make the following two observations on cash flow calculations and the impact of Tarpon's employee share option scheme.

Cash Flow Calculations

Baragutti noted that the board has used Clear's operating cash flow as a basis for its valuation of the entity. He intends to notify the board that whenever it encounters a company with a defined benefit scheme, in his opinion, it would be advisable to adjust CFO to reflect the fact that employer contributions are not the same as the cost of the scheme.

Employee Share Option Scheme

Although Tarpon does not have a defined benefit pension scheme, it does have an equivalent employee compensation expense in the form of an employee share option scheme. Just as there is a cost to Clear of its defined benefit scheme, the

expense in the form of an employee share option scheme. Just as there is a cost to Clear of its defined benefit scheme, the cost of Tarpon's share option scheme will be charged as an expense to the income statement and hence reduce retained earnings and equity.

Baragutti's comments regarding Tarpon's employee share option scheme are *most likely*:

A) correct.

B) incorrect because the cost of issuing shares under an employee stock option scheme will be taken directly to equity via OCI and hence not reduce retained earnings.

C) incorrect as the cost of issuing shares under an employee stock option scheme will not reduce equity.

Question #43 of 60

Question ID: 692263

Questions 103-108 relate to Cummings Enterprises, Inc.

Cummings Enterprises, Inc. (CEI), is a U.S. conglomerate that operates in a variety of markets. CEI's marginal tax rate is 40%. One of CEI's divisions manufactures small fiberglass products, such as bird baths and outdoor storage lockers. CEI is currently considering the expansion of its fiberglass product line to include booms and buckets for aerial lift trucks (often called cherry pickers), which are used for applications such as high voltage power line maintenance. The addition of this new product line is expected to increase CEI's sales by $750,000 per year.

Cal Holbrook, CEI's manager of fiberglass operations, is deciding whether to purchase a robotic system to produce cherry picker booms and buckets. The price of the robotic system will be $700,000, plus an additional $100,000 for shipping, site preparation, and installation. The new equipment will require a $50,000 increase in inventory and a $20,000 increase in accounts payable. The company uses MACRS to calculate depreciation for tax purposes and the straight-line method for financial reporting. The project has an expected life of four years, at which time the robot is expected to be sold for $75,000. The project will be funded with the debt/equity mix reflected by the company's current capital structure. CEI's pretax cost of new debt is 7%. Assume a WACC of 8%. Some of the relevant end-of-year cash flows for the robotic project are presented in Exhibit 1.

Exhibit 1: Relevant Cash Flows for Robotics Project

	Year 1	*Year 2*	*Year 3*	*Year 4*
Sales	$750,000	$750,000	$750,000	$750,000
Variable costs	$225,000	$225,000	$225,000	$225,000
Fixed expense	$75,000	$75,000	$75,000	$75,000
Depreciation	$264,000	$360,000	$120,000	$56,000
Earnings before tax (EBT)	$186,000	$90,000	$330,000	$394,000
Total after-tax cash flow	**$375,600**	**$414,000**	**$318,000**	**?**

Holbrook calculates the NPV of the robotic project and presents his findings to his supervisor, Geoffrey Mans. After reviewing the report, Mans makes the following recommendations:

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1. "You forgot to include the $100,000 we have spent so far on consultants and project engineers and who knows what else to evaluate the project's feasibility. Rerun the numbers including that amount and get the revised calculations to me this afternoon."
2. "Rerun the analysis assuming straight-line depreciation for tax purposes. The NPV will be higher, and we'll be more likely to get the project funded."

Cummings has two other projects under consideration that would affect the production of storage lockers. Project 1 relates to changing the production process, and Project 2 relates to expanding the distribution facility. Holbrook estimates the NPV of the expected cash flows for Project 1 at negative $7 million. An additional investment of $3 million would allow management to more rapidly adjust to the demand for a certain type of locker. The value of this flexibility is estimated at $9 million. He estimates that the NPV of the expected cash flows for Project 2 at $3 million. An expansion option would require an additional investment of $2 million. At this time, Cummings does not have any capital rationing restrictions.

Holbrook e-mails the lead analyst for the budgeting group and indicates that he cannot make a decision on Project 2 without knowing the value the expansion option will provide.

Holbrook calls a capital budgeting meeting with CEI's production and quality control manager. Holbrook opens the meeting by stating: "I think we should accept this project based solely on the fact that it provides great operating margins. Nevertheless, I think we should conduct net present value (NPV) analysis to confirm my opinion." Holbrook then receives the following comments:

Comment 1:	It is important that interest is included in the cash flows used with NPV analysis because interest is a real and very significant expense.
Comment 2:	If applied correctly, the NPV of this project will be higher if we discount economic profits instead of net after-tax operating cash flows in our analysis. I suggest we calculate economic profit as net operating profit after tax minus the dollar cost of capital.

....

Which of the following choices is *closest* to the Year 4 total cash flow for the robotics project in Exhibit 1?

A) $292,400.
B) $345,400.
C) $367,400.

Question #44 of 60

Question ID: 692264

Cummings Enterprises, Inc. (CEI), is a U.S. conglomerate that operates in a variety of markets. CEI's marginal tax rate is 40%. One of CEI's divisions manufactures small fiberglass products, such as bird baths and outdoor storage lockers. CEI is currently considering the expansion of its fiberglass product line to include booms and buckets for aerial lift trucks (often called cherry pickers), which are used for applications such as high voltage power line maintenance. The addition of this new product line is

expected to increase CEI's sales by $750,000 per year.

Cal Holbrook, CEI's manager of fiberglass operations, is deciding whether to purchase a robotic system to produce cherry picker booms and buckets. The price of the robotic system will be $700,000, plus an additional $100,000 for shipping, site preparation, and installation. The new equipment will require a $50,000 increase in inventory and a $20,000 increase in accounts payable. The company uses MACRS to calculate depreciation for tax purposes and the straight-line method for financial reporting. The project has an expected life of four years, at which time the robot is expected to be sold for $75,000. The project will be funded with the debt/equity mix reflected by the company's current capital structure. CEI's pretax cost of new debt is 7%. Assume a WACC of 8%. Some of the relevant end-of-year cash flows for the robotic project are presented in Exhibit 1.

Exhibit 1: Relevant Cash Flows for Robotics Project

	Year 1	*Year 2*	*Year 3*	*Year 4*
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Total after-tax cash flow	**$375,600**	**$414,000**	**$318,000**	**?**

Holbrook calculates the NPV of the robotic project and presents his findings to his supervisor, Geoffrey Mans. After reviewing the report, Mans makes the following recommendations:

1. "You forgot to include the $100,000 we have spent so far on consultants and project engineers and who knows what else to evaluate the project's feasibility. Rerun the numbers including that amount and get the revised calculations to me this afternoon."
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Holbrook e-mails the lead analyst for the budgeting group and indicates that he cannot make a decision on Project 2 without knowing the value the expansion option will provide.

Holbrook calls a capital budgeting meeting with CEI's production and quality control manager. Holbrook opens the meeting by stating: "I think we should accept this project based solely on the fact that it provides great operating margins. Nevertheless, I think we should conduct net present value (NPV) analysis to confirm my opinion." Holbrook then receives the following comments:

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expense.

Comment 2: If applied correctly, the NPV of this project will be higher if we discount economic profits instead of net after-tax operating cash flows in our analysis. I suggest we calculate economic profit as net operating profit after tax minus the dollar cost of capital.

Are Mans's recommendations regarding the robotic project correct or incorrect?

A) Both recommendations are correct.

B) Only one of the recommendations is correct.

C) Both recommendations are incorrect.

Question #45 of 60

Question ID: 692265

Cummings Enterprises, Inc. (CEI), is a U.S. conglomerate that operates in a variety of markets. CEI's marginal tax rate is 40%. One of CEI's divisions manufactures small fiberglass products, such as bird baths and outdoor storage lockers. CEI is currently considering the expansion of its fiberglass product line to include booms and buckets for aerial lift trucks (often called cherry pickers), which are used for applications such as high voltage power line maintenance. The addition of this new product line is expected to increase CEI's sales by $750,000 per year.

Cal Holbrook, CEI's manager of fiberglass operations, is deciding whether to purchase a robotic system to produce cherry picker booms and buckets. The price of the robotic system will be $700,000, plus an additional $100,000 for shipping, site preparation, and installation. The new equipment will require a $50,000 increase in inventory and a $20,000 increase in accounts payable. The company uses MACRS to calculate depreciation for tax purposes and the straight-line method for financial reporting. The project has an expected life of four years, at which time the robot is expected to be sold for $75,000. The project will be funded with the debt/equity mix reflected by the company's current capital structure. CEI's pretax cost of new debt is 7%. Assume a WACC of 8%. Some of the relevant end-of-year cash flows for the robotic project are presented in Exhibit 1.

Exhibit 1: Relevant Cash Flows for Robotics Project

	Year 1	*Year 2*	*Year 3*	*Year 4*
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Total after-tax cash flow	**$375,600**	**$414,000**	**$318,000**	**?**

Holbrook calculates the NPV of the robotic project and presents his findings to his supervisor, Geoffrey Mans. After reviewing the report, Mans makes the following recommendations:

1. "You forgot to include the $100,000 we have spent so far on consultants and project engineers and who knows what else to evaluate the project's feasibility. Rerun the numbers including that amount and get the revised calculations to me this afternoon."
2. "Rerun the analysis assuming straight-line depreciation for tax purposes. The NPV will be higher, and we'll be more likely to get the project funded."

Cummings has two other projects under consideration that would affect the production of storage lockers. Project 1 relates to changing the production process, and Project 2 relates to expanding the distribution facility. Holbrook estimates the NPV of the expected cash flows for Project 1 at negative $7 million. An additional investment of $3 million would allow management to more rapidly adjust to the demand for a certain type of locker. The value of this flexibility is estimated at $9 million. He estimates that the NPV of the expected cash flows for Project 2 at $3 million. An expansion option would require an additional investment of $2 million. At this time, Cummings does not have any capital rationing restrictions.

Holbrook e-mails the lead analyst for the budgeting group and indicates that he cannot make a decision on Project 2 without knowing the value the expansion option will provide.

Holbrook calls a capital budgeting meeting with CEI's production and quality control manager. Holbrook opens the meeting by stating: "I think we should accept this project based solely on the fact that it provides great operating margins. Nevertheless, I think we should conduct net present value (NPV) analysis to confirm my opinion." Holbrook then receives the following comments:

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Comment 2:	If applied correctly, the NPV of this project will be higher if we discount economic profits instead of net after-tax operating cash flows in our analysis. I suggest we calculate economic profit as net operating profit after tax minus the dollar cost of capital.

....

For this question only, assume that the investment in net working capital of $30,000 at the project inception is an inflow and that the amount nets to zero with the outflow that will occur at the end of the project. However, Holbrook does not include a cash flow for net working capital at the beginning or the end of the project. Assuming he correctly analyzes all the other components of the project, has Holbrook correctly estimated the project's net present value?

A) Yes.

B) No, he underestimated the project's NPV by approximately $7,950.

C) No, he underestimated the project's NPV by approximately $2,222.

Question #46 of 60

Question ID: 692267

Cummings Enterprises, Inc. (CEI), is a U.S. conglomerate that operates in a variety of markets. CEI's marginal tax rate is 40%. One of CEI's divisions manufactures small fiberglass products, such as bird baths and outdoor storage lockers. CEI is currently

considering the expansion of its fiberglass product line to include booms and buckets for aerial lift trucks (often called cherry pickers), which are used for applications such as high voltage power line maintenance. The addition of this new product line is expected to increase CEI's sales by $750,000 per year.

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Total after-tax cash flow	**$375,600**	**$414,000**	**$318,000**	**?**

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Which of the following choices is *closest* to the overall NPV for Project 1, and is Holbrook correct to wait for more information before deciding on Project 2?

A) The overall NPV is -$1 million, and Holbrook is correct.

B) The overall NPV is -$1 million, and Holbrook is incorrect.

C) The overall NPV is $13 million, and Holbrook is incorrect.

Question #47 of 60

Question ID: 692268

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....

The economic income for Year 3 for the robotics project from Exhibit 1 is *closest* to:

A) $19,400.

B) $48,700.

C) $49,400.

Question #48 of 60

Question ID: 692266

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considering the expansion of its fiberglass product line to include booms and buckets for aerial lift trucks (often called cherry pickers), which are used for applications such as high voltage power line maintenance. The addition of this new product line is expected to increase CEI's sales by $750,000 per year.

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1. "You forgot to include the $100,000 we have spent so far on consultants and project engineers and who knows what else to evaluate the project's feasibility. Rerun the numbers including that amount and get the revised calculations to me this afternoon."
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Holbrook e-mails the lead analyst for the budgeting group and indicates that he cannot make a decision on Project 2 without knowing the value the expansion option will provide.

Holbrook calls a capital budgeting meeting with CEI's production and quality control manager. Holbrook opens the meeting by stating: "I think we should accept this project based solely on the fact that it provides great operating margins. Nevertheless, I think we should conduct net present value (NPV) analysis to confirm my opinion." Holbrook then receives the following comments:

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Comment 2: If applied correctly, the NPV of this project will be higher if we discount economic profits instead of net after-tax operating cash flows in our analysis. I suggest we calculate economic profit as net operating profit after tax minus the dollar cost of capital.

Are the comments made by the CEI's production and quality assurance manager correct or incorrect?

A) Both comments are correct.
B) Only one of the comments is correct.
C) Both comments are incorrect.

Question #49 of 60

Question ID: 692237

Questions 109-114 relate to Jon Stevenson, CFA.

Jon Stevenson, CFA, is an experienced equity fund manager who has recently taken a position with Lohsi Clearview, a UK-based hedge fund that has combined a wide range of strategies to deliver impressive returns over the last five years. One of the fund's strategies is to invest in high-credit-risk fixed income instruments. The fund has an excellent track record of identifying bonds in this sector that subsequently outperform the market.

Stevenson wishes to familiarize himself with the fund's strategies and has started by looking at some of the techniques used in analyzing fixed income instruments. Exhibit 1 shows the firm's approach to analyzing credit risk.

Exhibit 1: Credit Analysis Tools

Credit Ratings
Before undertaking any level of detailed analysis, the credit rating from the three major agencies should be obtained. Typically an instrument that is investment grade according to all three agencies will not be worthy of further consideration.
Structural Models
An initial analysis using a simple structural model should be undertaken to calculate the present value of the expected loss.
Reduced Form Models
Detailed analysis should be undertaken using the reduced form models used by the fixed income team. This analysis should only be undertaken once the structural model analysis has been completed.

Stevenson is surprised that the fund uses credit ratings to filter out investment grade bonds as not worthy of consideration. In his experience, ratings agencies have often been wrong and he intends to send a note to his supervisor stating the following points arguing that credit ratings should not be relied upon as a filter:

points arguing that credit ratings should not be relied upon as a filter.

Point 1: Ratings are volatile over time, which reduces their usefulness as an indication of a debt offering's default probability.

Point 2: Ratings do not implicitly depend on the business cycle stage, whereas a debt offering's default probability does.

Stevenson has no experience with structural models and is interested in learning more. He finds an analysis that has been completed for a recent bond issue. The results are shown in Exhibit 2.

Exhibit 2: IMC Bond Issue (ID 062014555612) Structural Model Results

Asset value	A_t	1,200
Expected return on assets	μ	0.04
Risk free rate	r	0.02
Face value	K	850
Time to maturity	T-t	1.5
Return volatility	σ	0.28
d_1		1.26452
d_2		0.92159
$N(-d_1)$		0.1030
$N(-d_2)$		0.1784
e_1		1.35200
e_2		1.00907
$N(-e_1)$		0.0882
$N(-e_2)$		0.1565
Expected loss		22.86
PV expected loss		23.51

Which of the credit analysis models shown in Exhibit 1 can only be used under the assumption that the issuing company's assets trade in a frictionless market?

A) Structural models.

B) Reduced form models.

C) Both structural models and reduced form models.

Question #50 of 60

Question ID: 692238

Jon Stevenson, CFA, is an experienced equity fund manager who has recently taken a position with Lohsi Clearview, a UK-based hedge fund that has combined a wide range of strategies to deliver impressive returns over the last five years. One of the fund's strategies is to invest in high-credit-risk fixed income instruments. The fund has an excellent track record of

identifying bonds in this sector that subsequently outperform the market.

Stevenson wishes to familiarize himself with the fund's strategies and has started by looking at some of the techniques used in analyzing fixed income instruments. Exhibit 1 shows the firm's approach to analyzing credit risk.

Exhibit 1: Credit Analysis Tools

Credit Ratings
Before undertaking any level of detailed analysis, the credit rating from the three major agencies should be obtained. Typically an instrument that is investment grade according to all three agencies will not be worthy of further consideration.
Structural Models
An initial analysis using a simple structural model should be undertaken to calculate the present value of the expected loss.
Reduced Form Models
Detailed analysis should be undertaken using the reduced form models used by the fixed income team. This analysis should only be undertaken once the structural model analysis has been completed.

Stevenson is surprised that the fund uses credit ratings to filter out investment grade bonds as not worthy of consideration. In his experience, ratings agencies have often been wrong and he intends to send a note to his supervisor stating the following points arguing that credit ratings should not be relied upon as a filter:

Point 1: Ratings are volatile over time, which reduces their usefulness as an indication of a debt offering's default probability.

Point 2: Ratings do not implicitly depend on the business cycle stage, whereas a debt offering's default probability does.

Stevenson has no experience with structural models and is interested in learning more. He finds an analysis that has been completed for a recent bond issue. The results are shown in Exhibit 2.

Exhibit 2: IMC Bond Issue (ID 062014555612) Structural Model Results

Asset value	A_t	1,200
Expected return on assets	μ	0.04
Risk free rate	r	0.02
Face value	K	850
Time to maturity	T-t	1.5
Return volatility	σ	0.28
d_1		1.26452
d_2		0.92159
$N(-d_1)$		0.1030
$N(-d_2)$		0.1784
e_1		1.35200
e_2		1.00907
$N(-e_1)$		0.0882
$N(-e_2)$		0.1565

Expected loss	22.86
PV expected loss	23.51

When using reduced form models, which of the following statements is *most accurate*?

A) It must be assumed that the riskless rate of interest is constant over time.

B) The time T value of the company's assets has a lognormal distribution.

C) For a given state of the economy, whether a company defaults depends only on company-specific considerations.

Question #51 of 60

Question ID: 692233

Jon Stevenson, CFA, is an experienced equity fund manager who has recently taken a position with Lohsi Clearview, a UK-based hedge fund that has combined a wide range of strategies to deliver impressive returns over the last five years. One of the fund's strategies is to invest in high-credit-risk fixed income instruments. The fund has an excellent track record of identifying bonds in this sector that subsequently outperform the market.

Stevenson wishes to familiarize himself with the fund's strategies and has started by looking at some of the techniques used in analyzing fixed income instruments. Exhibit 1 shows the firm's approach to analyzing credit risk.

Exhibit 1: Credit Analysis Tools

Credit Ratings
Before undertaking any level of detailed analysis, the credit rating from the three major agencies should be obtained. Typically an instrument that is investment grade according to all three agencies will not be worthy of further consideration.
Structural Models
An initial analysis using a simple structural model should be undertaken to calculate the present value of the expected loss.
Reduced Form Models
Detailed analysis should be undertaken using the reduced form models used by the fixed income team. This analysis should only be undertaken once the structural model analysis has been completed.

Stevenson is surprised that the fund uses credit ratings to filter out investment grade bonds as not worthy of consideration. In his experience, ratings agencies have often been wrong and he intends to send a note to his supervisor stating the following points arguing that credit ratings should not be relied upon as a filter:

Point 1: Ratings are volatile over time, which reduces their usefulness as an indication of a debt offering's default probability.

Point 2: Ratings do not implicitly depend on the business cycle stage,

whereas a debt offering's default probability does.

Stevenson has no experience with structural models and is interested in learning more. He finds an analysis that has been completed for a recent bond issue. The results are shown in Exhibit 2.

Exhibit 2: IMC Bond Issue (ID 062014555612) Structural Model Results

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Risk free rate	r	0.02
Face value	K	850
Time to maturity	T-t	1.5
Return volatility	σ	0.28
d_1		1.26452
d_2		0.92159
$N(-d_1)$		0.1030
$N(-d_2)$		0.1784
e_1		1.35200
e_2		1.00907
$N(-e_1)$		0.0882
$N(-e_2)$		0.1565
Expected loss		22.86
PV expected loss		23.51

Which of Stevenson's points regarding the reliability of credit ratings is *most accurate*?

A) Point 1 only.

B) Point 2 only.

C) Neither point is correct.

Question #52 of 60

Question ID: 692234

Jon Stevenson, CFA, is an experienced equity fund manager who has recently taken a position with Lohsi Clearview, a UK-based hedge fund that has combined a wide range of strategies to deliver impressive returns over the last five years. One of the fund's strategies is to invest in high-credit-risk fixed income instruments. The fund has an excellent track record of identifying bonds in this sector that subsequently outperform the market.

Stevenson wishes to familiarize himself with the fund's strategies and has started by looking at some of the techniques used in analyzing fixed income instruments. Exhibit 1 shows the firm's approach to analyzing credit risk.

Exhibit 1: Credit Analysis Tools

Credit Ratings

Before undertaking any level of detailed analysis, the credit rating from

Before undertaking any level of detailed analysis, the credit rating from the three major agencies should be obtained. Typically an instrument that is investment grade according to all three agencies will not be worthy of further consideration.
Structural Models
An initial analysis using a simple structural model should be undertaken to calculate the present value of the expected loss.
Reduced Form Models
Detailed analysis should be undertaken using the reduced form models used by the fixed income team. This analysis should only be undertaken once the structural model analysis has been completed.

Stevenson is surprised that the fund uses credit ratings to filter out investment grade bonds as not worthy of consideration. In his experience, ratings agencies have often been wrong and he intends to send a note to his supervisor stating the following points arguing that credit ratings should not be relied upon as a filter:

Point 1: Ratings are volatile over time, which reduces their usefulness as an indication of a debt offering's default probability.

Point 2: Ratings do not implicitly depend on the business cycle stage, whereas a debt offering's default probability does.

Stevenson has no experience with structural models and is interested in learning more. He finds an analysis that has been completed for a recent bond issue. The results are shown in Exhibit 2.

Exhibit 2: IMC Bond Issue (ID 062014555612) Structural Model Results

Asset value	A_t	1,200
Expected return on assets	μ	0.04
Risk free rate	r	0.02
Face value	K	850
Time to maturity	T-t	1.5
Return volatility	σ	0.28
d_1		1.26452
d_2		0.92159
$N(-d_1)$		0.1030
$N(-d_2)$		0.1784
e_1		1.35200
e_2		1.00907
$N(-e_1)$		0.0882
$N(-e_2)$		0.1565
Expected loss		22.86
PV expected loss		23.51

....

According to the structural model shown in Exhibit 2, the maximum amount an investor holding the bond would pay to a third party to remove the risk of default would be:

A) \$0.65.

B) \$22.86.

C) \$23.51.

Question #53 of 60

Question ID: 692235

Jon Stevenson, CFA, is an experienced equity fund manager who has recently taken a position with Lohsi Clearview, a UK-based hedge fund that has combined a wide range of strategies to deliver impressive returns over the last five years. One of the fund's strategies is to invest in high-credit-risk fixed income instruments. The fund has an excellent track record of identifying bonds in this sector that subsequently outperform the market.

Stevenson wishes to familiarize himself with the fund's strategies and has started by looking at some of the techniques used in analyzing fixed income instruments. Exhibit 1 shows the firm's approach to analyzing credit risk.

Exhibit 1: Credit Analysis Tools

Credit Ratings
Before undertaking any level of detailed analysis, the credit rating from the three major agencies should be obtained. Typically an instrument that is investment grade according to all three agencies will not be worthy of further consideration.
Structural Models
An initial analysis using a simple structural model should be undertaken to calculate the present value of the expected loss.
Reduced Form Models
Detailed analysis should be undertaken using the reduced form models used by the fixed income team. This analysis should only be undertaken once the structural model analysis has been completed.

Stevenson is surprised that the fund uses credit ratings to filter out investment grade bonds as not worthy of consideration. In his experience, ratings agencies have often been wrong and he intends to send a note to his supervisor stating the following points arguing that credit ratings should not be relied upon as a filter:

Point 1: Ratings are volatile over time, which reduces their usefulness as an indication of a debt offering's default probability.

Point 2: Ratings do not implicitly depend on the business cycle stage, whereas a debt offering's default probability does.

Stevenson has no experience with structural models and is interested in learning more. He finds an analysis that has been completed for a recent bond issue. The results are shown in Exhibit 2.

Exhibit 2: IMC Bond Issue (ID 062014555612) Structural Model Results

Asset value	A_t	1,200
Expected return on assets	μ	0.04

Risk free rate	r	0.02
Face value	K	850
Time to maturity	T-t	1.5
Return volatility	σ	0.28
d_1		1.26452
d_2		0.92159
$N(-d_1)$		0.1030
$N(-d_2)$		0.1784
e_1		1.35200
e_2		1.00907
$N(-e_1)$		0.0882
$N(-e_2)$		0.1565
Expected loss		22.86
PV expected loss		23.51

....

The results shown in Exhibit 2 indicate that the:

A) time value of money discount exceeds the risk premium for risk of credit loss.

B) risk premium for risk of credit loss exceeds the time value of money discount.

C) risk premium for risk of credit loss is $0.65.

Question #54 of 60

Question ID: 692236

Jon Stevenson, CFA, is an experienced equity fund manager who has recently taken a position with Lohsi Clearview, a UK-based hedge fund that has combined a wide range of strategies to deliver impressive returns over the last five years. One of the fund's strategies is to invest in high-credit-risk fixed income instruments. The fund has an excellent track record of identifying bonds in this sector that subsequently outperform the market.

Stevenson wishes to familiarize himself with the fund's strategies and has started by looking at some of the techniques used in analyzing fixed income instruments. Exhibit 1 shows the firm's approach to analyzing credit risk.

Exhibit 1: Credit Analysis Tools

Credit Ratings
Before undertaking any level of detailed analysis, the credit rating from the three major agencies should be obtained. Typically an instrument that is investment grade according to all three agencies will not be worthy of further consideration.
Structural Models
An initial analysis using a simple structural model should be undertaken to calculate the present value of the expected loss.
Reduced Form Models

Detailed analysis should be undertaken using the reduced form models used by the fixed income team. This analysis should only be undertaken once the structural model analysis has been completed.

Stevenson is surprised that the fund uses credit ratings to filter out investment grade bonds as not worthy of consideration. In his experience, ratings agencies have often been wrong and he intends to send a note to his supervisor stating the following points arguing that credit ratings should not be relied upon as a filter:

Point 1: Ratings are volatile over time, which reduces their usefulness as an indication of a debt offering's default probability.

Point 2: Ratings do not implicitly depend on the business cycle stage, whereas a debt offering's default probability does.

Stevenson has no experience with structural models and is interested in learning more. He finds an analysis that has been completed for a recent bond issue. The results are shown in Exhibit 2.

Exhibit 2: IMC Bond Issue (ID 062014555612) Structural Model Results

Asset value	A_t	1,200
Expected return on assets	μ	0.04
Risk free rate	r	0.02
Face value	K	850
Time to maturity	T-t	1.5
Return volatility	σ	0.28
d_1		1.26452
d_2		0.92159
$N(-d_1)$		0.1030
$N(-d_2)$		0.1784
e_1		1.35200
e_2		1.00907
$N(-e_1)$		0.0882
$N(-e_2)$		0.1565
Expected loss		22.86
PV expected loss		23.51

If the volatility estimate is changed to 30% in the structural model shown in Exhibit 2, the calculated value of IMC Bond would *most likely*:

A) remain the same.

B) decrease.

C) increase.

Question #55 of 60

Question #55 of 60

Question ID: 692325

Questions 115-120 relate to Parkway Terrace.

Rita Larson, CFA, is an investment analyst for Siprah Properties, Inc. A group of wealthy investors, Ken Lundy, Chun Park, and Kareem Shabaz, are interested in purchasing Parkway Terrace, a 120-unit luxury apartment complex in Southeastern Florida. The current owners of Parkway Terrace have agreed to sell the property for $40,000,000.

Siprah represents both the existing owners and the potential new owners and are privy to additional information. Exhibits 1 and 2 show the information Larson has collected during her due diligence.

Exhibit 1: Parkway Terrace Specifics

Parkway Terrace	
Projected first year net operating income	$3.3 million
Location/Condition	Prime/Good
NOI growth rate	2.5%
LTV	75.0%
Loan Term	25 years
Loan Interest Rate	4.5%
Monthly Debt Service	$166,750
Square footage	240,000
Expected holding period	10 years
Parkway Terrace	*Cost estimates*
Effective age of building	10 years
Total economic life	50 years
Estimated value of land	$12,500,000
Replacement cost (p.s.f.)	$175.00
Developer's profit (p.s.f.)	$15.00
Curable deterioration	$5,000,000
Total obsolescence	$4,000,000
Expected selling price in 10 yrs	$60,000,000
Loan balance at end of 10 yrs	$21,797,543

Exhibit 2: Recent Transactions of Luxury Apartment Buildings in Southeastern Florida

Building	*Craig Court*	*Kenton Place*	*Hester Oasis*
Size in square feet	200,000	150,000	300,000
Age in years	7	10	13
Condition	Fair	Good	Good
Location	Prime	Secondary	Secondary
Age of transaction (in	9	5	16

months)			
Sales price	$32,000,000	$24,000,000	$45,000,000
Projected NOI	$2,560,000	$1,800,000	$3,150,000

Additional information:

- Depreciation is 1.5% per year.
- Condition can be good, fair, or bad. 7.5% is the adjustment needed per classification.
- Location can be prime, secondary, or tertiary. Prime locations are the most sought-after and 7.5% is the adjustment needed per classification.
- Market prices have been increasing at a rate of 0.50% per month.

Lundy states that all returns and ratios must exceed the minimum standards as listed below.

Minimum requirements	
Levered required rate of return	20.0%
Debt Service Coverage Ratio	1.50X
Equity Dividend Rate	25.0%

Economic Outlook for Southeast Florida

- Home prices are expected to rise.
- Interest rates are expected to increase.
- Population growth is expected to be higher than in other areas as more wealthy retirees are moving to the region.

The investors make the following statements about how to best approach this investment:

Ken Lundy:	"After we buy Parkway Terrace, we should offer shorter leases to take advantage of market conditions."
Chun Park:	"I think that after we buy, we should offer long leases to lock-in tenants and maximize profitability."
Kareem Shabaz:	"If we buy, we should take advantage of the low interest rates by using as much leverage as possible."

Larson is interested in using a real estate index in her analysis of suitability of real estate as an asset class for several of Siprah's clients. She notes that the firm subscribes to a proprietary index provided by REIQ. The REIQ index is an appraisal-based index that is very popular among real estate professionals. Larson is concerned about appraisal lag in the index and wants to adjust the index to remove this lag.

The estimated value of the property using the direct capitalization approach is *closest* to:

A) $41.3 million.

B) $42.0 million.

C) $44.0 million.

Question #56 of 60

Question ID: 692329

Rita Larson, CFA, is an investment analyst for Siprah Properties, Inc. A group of wealthy investors, Ken Lundy, Chun Park, and Kareem Shabaz, are interested in purchasing Parkway Terrace, a 120-unit luxury apartment complex in Southeastern Florida. The current owners of Parkway Terrace have agreed to sell the property for $40,000,000.

Siprah represents both the existing owners and the potential new owners and are privy to additional information. Exhibits 1 and 2 show the information Larson has collected during her due diligence.

Exhibit 1: Parkway Terrace Specifics

Parkway Terrace	
Projected first year net operating income	$3.3 million
Location/Condition	Prime/Good
NOI growth rate	2.5%
LTV	75.0%
Loan Term	25 years
Loan Interest Rate	4.5%
Monthly Debt Service	$166,750
Square footage	240,000
Expected holding period	10 years
Parkway Terrace	*Cost estimates*
Effective age of building	10 years
Total economic life	50 years
Estimated value of land	$12,500,000
Replacement cost (p.s.f.)	$175.00
Developer's profit (p.s.f.)	$15.00
Curable deterioration	$5,000,000
Total obsolescence	$4,000,000
Expected selling price in 10 yrs	$60,000,000
Loan balance at end of 10 yrs	$21,797,543

Exhibit 2: Recent Transactions of Luxury Apartment Buildings in Southeastern Florida

Building	*Craig Court*	*Kenton Place*	*Hester Oasis*
Size in square feet	200,000	150,000	300,000
Age in years	7	10	13
Condition	Fair	Good	Good
Location	Prime	Secondary	Secondary

Age of transaction (in months)	9	5	16
Sales price	$32,000,000	$24,000,000	$45,000,000
Projected NOI	$2,560,000	$1,800,000	$3,150,000

Additional information:

- Depreciation is 1.5% per year.
- Condition can be good, fair, or bad. 7.5% is the adjustment needed per classification.
- Location can be prime, secondary, or tertiary. Prime locations are the most sought-after and 7.5% is the adjustment needed per classification.
- Market prices have been increasing at a rate of 0.50% per month.

Lundy states that all returns and ratios must exceed the minimum standards as listed below.

Minimum requirements	
Levered required rate of return	20.0%
Debt Service Coverage Ratio	1.50X
Equity Dividend Rate	25.0%

Economic Outlook for Southeast Florida

- Home prices are expected to rise.
- Interest rates are expected to increase.
- Population growth is expected to be higher than in other areas as more wealthy retirees are moving to the region.

The investors make the following statements about how to best approach this investment:

Ken Lundy:	"After we buy Parkway Terrace, we should offer shorter leases to take advantage of market conditions."
Chun Park:	"I think that after we buy, we should offer long leases to lock-in tenants and maximize profitability."
Kareem Shabaz:	"If we buy, we should take advantage of the low interest rates by using as much leverage as possible."

Larson is interested in using a real estate index in her analysis of suitability of real estate as an asset class for several of Siprah's clients. She notes that the firm subscribes to a proprietary index provided by REIQ. The REIQ index is an appraisal-based index that is very popular among real estate professionals. Larson is concerned about appraisal lag in the index and wants to adjust the index to remove this lag.

The estimated value of the property using the sales comparison approach is *closest* to:

A) $37.6 million.

B) $42.2 million.

C) $43.2 million.

Question #57 of 60

Question ID: 692332

Rita Larson, CFA, is an investment analyst for Siprah Properties, Inc. A group of wealthy investors, Ken Lundy, Chun Park, and Kareem Shabaz, are interested in purchasing Parkway Terrace, a 120-unit luxury apartment complex in Southeastern Florida. The current owners of Parkway Terrace have agreed to sell the property for $40,000,000.

Siprah represents both the existing owners and the potential new owners and are privy to additional information. Exhibits 1 and 2 show the information Larson has collected during her due diligence.

Exhibit 1: Parkway Terrace Specifics

Parkway Terrace	
Projected first year net operating income	$3.3 million
Location/Condition	Prime/Good
NOI growth rate	2.5%
LTV	75.0%
Loan Term	25 years
Loan Interest Rate	4.5%
Monthly Debt Service	$166,750
Square footage	240,000
Expected holding period	10 years
Parkway Terrace	*Cost estimates*
Effective age of building	10 years
Total economic life	50 years
Estimated value of land	$12,500,000
Replacement cost (p.s.f.)	$175.00
Developer's profit (p.s.f.)	$15.00
Curable deterioration	$5,000,000
Total obsolescence	$4,000,000
Expected selling price in 10 yrs	$60,000,000
Loan balance at end of 10 yrs	$21,797,543

Exhibit 2: Recent Transactions of Luxury Apartment Buildings in Southeastern Florida

Building	*Craig Court*	*Kenton Place*	*Hester Oasis*
Size in square feet	200,000	150,000	300,000
Age in years	7	10	13
Condition	Fair	Good	Good

Location	Prime	Secondary	Secondary
Age of transaction (in months)	9	5	16
Sales price	$32,000,000	$24,000,000	$45,000,000
Projected NOI	$2,560,000	$1,800,000	$3,150,000

Additional information:

- Depreciation is 1.5% per year.
- Condition can be good, fair, or bad. 7.5% is the adjustment needed per classification.
- Location can be prime, secondary, or tertiary. Prime locations are the most sought-after and 7.5% is the adjustment needed per classification.
- Market prices have been increasing at a rate of 0.50% per month.

Lundy states that all returns and ratios must exceed the minimum standards as listed below.

Minimum requirements	
Levered required rate of return	20.0%
Debt Service Coverage Ratio	1.50X
Equity Dividend Rate	25.0%

Economic Outlook for Southeast Florida

- Home prices are expected to rise.
- Interest rates are expected to increase.
- Population growth is expected to be higher than in other areas as more wealthy retirees are moving to the region.

The investors make the following statements about how to best approach this investment:

Ken Lundy:	"After we buy Parkway Terrace, we should offer shorter leases to take advantage of market conditions."
Chun Park:	"I think that after we buy, we should offer long leases to lock-in tenants and maximize profitability."
Kareem Shabaz:	"If we buy, we should take advantage of the low interest rates by using as much leverage as possible."

Larson is interested in using a real estate index in her analysis of suitability of real estate as an asset class for several of Siprah's clients. She notes that the firm subscribes to a proprietary index provided by REIQ. The REIQ index is an appraisal-based index that is very popular among real estate professionals. Larson is concerned about appraisal lag in the index and wants to adjust the index to remove this lag.

For this question only, assume that the NOI growth rate is 0%. Based on Lundy's minimum requirements, the Parkway Terrace project is:

A) not worth pursuing because the equity dividend rate is below the minimum required.

B) worth pursuing because all three standards are met.

C) not worth pursuing because the debt service coverage ratio is below the minimum required.

Question #58 of 60

Question ID: 692330

Rita Larson, CFA, is an investment analyst for Siprah Properties, Inc. A group of wealthy investors, Ken Lundy, Chun Park, and Kareem Shabaz, are interested in purchasing Parkway Terrace, a 120-unit luxury apartment complex in Southeastern Florida. The current owners of Parkway Terrace have agreed to sell the property for $40,000,000.

Siprah represents both the existing owners and the potential new owners and are privy to additional information. Exhibits 1 and 2 show the information Larson has collected during her due diligence.

Exhibit 1: Parkway Terrace Specifics

Parkway Terrace	
Projected first year net operating income	$3.3 million
Location/Condition	Prime/Good
NOI growth rate	2.5%
LTV	75.0%
Loan Term	25 years
Loan Interest Rate	4.5%
Monthly Debt Service	$166,750
Square footage	240,000
Expected holding period	10 years
Parkway Terrace	*Cost estimates*
Effective age of building	10 years
Total economic life	50 years
Estimated value of land	$12,500,000
Replacement cost (p.s.f.)	$175.00
Developer's profit (p.s.f.)	$15.00
Curable deterioration	$5,000,000
Total obsolescence	$4,000,000
Expected selling price in 10 yrs	$60,000,000
Loan balance at end of 10 yrs	$21,797,543

Exhibit 2: Recent Transactions of Luxury Apartment Buildings in Southeastern Florida

Building	*Craig Court*	*Kenton Place*	*Hester Oasis*
Size in square feet	200,000	150,000	300,000

Age in years	7	10	13
Condition	Fair	Good	Good
Location	Prime	Secondary	Secondary
Age of transaction (in months)	9	5	16
Sales price	$32,000,000	$24,000,000	$45,000,000
Projected NOI	$2,560,000	$1,800,000	$3,150,000

Additional information:

- Depreciation is 1.5% per year.
- Condition can be good, fair, or bad. 7.5% is the adjustment needed per classification.
- Location can be prime, secondary, or tertiary. Prime locations are the most sought-after and 7.5% is the adjustment needed per classification.
- Market prices have been increasing at a rate of 0.50% per month.

Lundy states that all returns and ratios must exceed the minimum standards as listed below.

Minimum requirements	
Levered required rate of return	20.0%
Debt Service Coverage Ratio	1.50X
Equity Dividend Rate	25.0%

Economic Outlook for Southeast Florida

- Home prices are expected to rise.
- Interest rates are expected to increase.
- Population growth is expected to be higher than in other areas as more wealthy retirees are moving to the region.

The investors make the following statements about how to best approach this investment:

Ken Lundy:	"After we buy Parkway Terrace, we should offer shorter leases to take advantage of market conditions."
Chun Park:	"I think that after we buy, we should offer long leases to lock-in tenants and maximize profitability."
Kareem Shabaz:	"If we buy, we should take advantage of the low interest rates by using as much leverage as possible."

Larson is interested in using a real estate index in her analysis of suitability of real estate as an asset class for several of Siprah's clients. She notes that the firm subscribes to a proprietary index provided by REIQ. The REIQ index is an appraisal-based index that is very popular among real estate professionals. Larson is concerned about appraisal lag in the index and wants to adjust the index to remove this lag.

The estimated value of the property using the cost approach is *closest* to:

A) $28.5 million.

B) $41.0 million.

C) $45.0 million.

Question #59 of 60

Question ID: 692251

Rita Larson, CFA, is an investment analyst for Siprah Properties, Inc. A group of wealthy investors, Ken Lundy, Chun Park, and Kareem Shabaz, are interested in purchasing Parkway Terrace, a 120-unit luxury apartment complex in Southeastern Florida. The current owners of Parkway Terrace have agreed to sell the property for $40,000,000.

Siprah represents both the existing owners and the potential new owners and are privy to additional information. Exhibits 1 and 2 show the information Larson has collected during her due diligence.

Exhibit 1: Parkway Terrace Specifics

Parkway Terrace	
Projected first year net operating income	$3.3 million
Location/Condition	Prime/Good
NOI growth rate	2.5%
LTV	75.0%
Loan Term	25 years
Loan Interest Rate	4.5%
Monthly Debt Service	$166,750
Square footage	240,000
Expected holding period	10 years
Parkway Terrace	*Cost estimates*
Effective age of building	10 years
Total economic life	50 years
Estimated value of land	$12,500,000
Replacement cost (p.s.f.)	$175.00
Developer's profit (p.s.f.)	$15.00
Curable deterioration	$5,000,000
Total obsolescence	$4,000,000
Expected selling price in 10 yrs	$60,000,000
Loan balance at end of 10 yrs	$21,797,543

Exhibit 2: Recent Transactions of Luxury Apartment Buildings in Southeastern Florida

Building	*Craig Court*	*Kenton Place*	*Hester Oasis*

Size in square feet	200,000	150,000	300,000
Age in years	7	10	13
Condition	Fair	Good	Good
Location	Prime	Secondary	Secondary
Age of transaction (in months)	9	5	16
Sales price	$32,000,000	$24,000,000	$45,000,000
Projected NOI	$2,560,000	$1,800,000	$3,150,000

Additional information:

- Depreciation is 1.5% per year.
- Condition can be good, fair, or bad. 7.5% is the adjustment needed per classification.
- Location can be prime, secondary, or tertiary. Prime locations are the most sought-after and 7.5% is the adjustment needed per classification.
- Market prices have been increasing at a rate of 0.50% per month.

Lundy states that all returns and ratios must exceed the minimum standards as listed below.

Minimum requirements	
Levered required rate of return	20.0%
Debt Service Coverage Ratio	1.50X
Equity Dividend Rate	25.0%

Economic Outlook for Southeast Florida

- Home prices are expected to rise.
- Interest rates are expected to increase.
- Population growth is expected to be higher than in other areas as more wealthy retirees are moving to the region.

The investors make the following statements about how to best approach this investment:

Ken Lundy:	"After we buy Parkway Terrace, we should offer shorter leases to take advantage of market conditions."
Chun Park:	"I think that after we buy, we should offer long leases to lock-in tenants and maximize profitability."
Kareem Shabaz:	"If we buy, we should take advantage of the low interest rates by using as much leverage as possible."

Larson is interested in using a real estate index in her analysis of suitability of real estate as an asset class for several of Siprah's clients. She notes that the firm subscribes to a proprietary index provided by REIQ. The REIQ index is an appraisal-based index that is very popular among real estate professionals. Larson is concerned about appraisal lag in the index and wants to adjust the index to remove this lag.

....

Which stated approach is *least likely* to result in an increase in potential returns?

A) Chun Park's.

B) Ken Lundy's.

C) Kareem Shabaz's.

Question #60 of 60

Question ID: 692255

Rita Larson, CFA, is an investment analyst for Siprah Properties, Inc. A group of wealthy investors, Ken Lundy, Chun Park, and Kareem Shabaz, are interested in purchasing Parkway Terrace, a 120-unit luxury apartment complex in Southeastern Florida. The current owners of Parkway Terrace have agreed to sell the property for $40,000,000.

Siprah represents both the existing owners and the potential new owners and are privy to additional information. Exhibits 1 and 2 show the information Larson has collected during her due diligence.

Exhibit 1: Parkway Terrace Specifics

Parkway Terrace	
Projected first year net operating income	$3.3 million
Location/Condition	Prime/Good
NOI growth rate	2.5%
LTV	75.0%
Loan Term	25 years
Loan Interest Rate	4.5%
Monthly Debt Service	$166,750
Square footage	240,000
Expected holding period	10 years
Parkway Terrace	*Cost estimates*
Effective age of building	10 years
Total economic life	50 years
Estimated value of land	$12,500,000
Replacement cost (p.s.f.)	$175.00
Developer's profit (p.s.f.)	$15.00
Curable deterioration	$5,000,000
Total obsolescence	$4,000,000
Expected selling price in 10 yrs	$60,000,000
Loan balance at end of 10 yrs	$21,797,543

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To correct for appraisal lag in the REIQ index, which of the following is the *least appropriate* course of action for Larson?

A) 'Unsmooth' the index.

B) Use a transaction-based index.

C) Use more-recent appraisals.